

UJU ELECTRONICS

WORLD CLASS CONNECTOR COMPANY

IT Connector
DISPLAY Connector
AUTOMOBILE Connector

WORLD CLASS CONNECTOR COMPANY

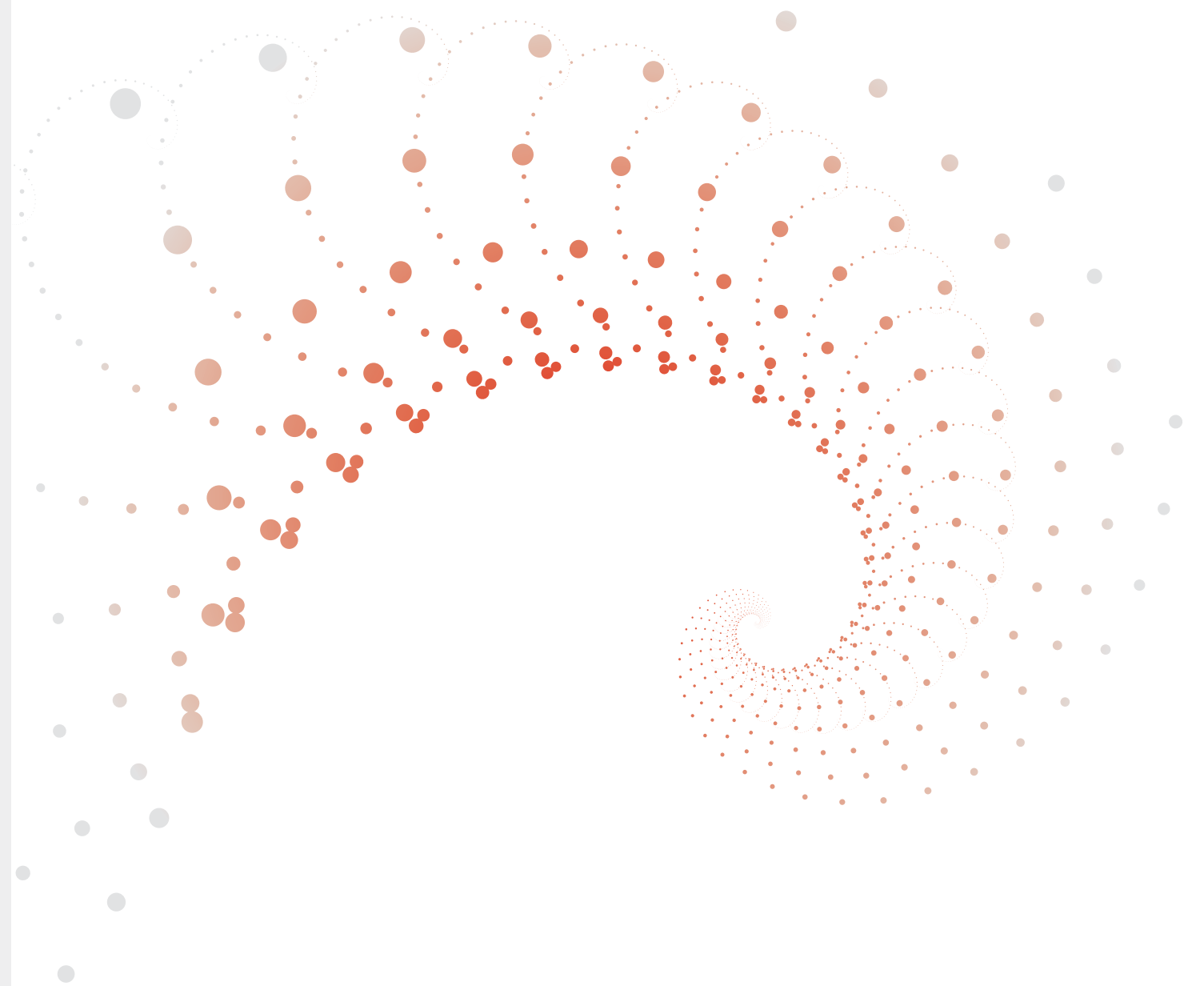
Refers to Join of [ju:]([You]) and everything
within the Universe, the space surrounding
the whole world



UJU ELECTRONICS

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- It puts precedence on meeting customer's demand by timely providing products of optimal quality and price for customers.
- It develops competitiveness by seeking No.1 Members by sectors through aggressively fostering the talented.
- It provides the core connection link in the cutting edge industrialization, and further, becomes a linker among human beings.

Greetings

UJU Electronics

UJU Electronics Co., Ltd. which has focused on the precision connectors and electronic parts since its foundation, manufactures products of the best quality through the professional talented engineers with up to date automated equipments. Our company, holding cutting-edge system, computerized control molding machines, high speed precision presses which are essential for the products design and tooling development, produces high value added products through the high speed assembly line with automated plating line.

In addition, we make every efforts to become a leading company in the worldclass precision connector sector through the extension of precision connector manufacturing system, development of new products, linked with IT makers of TFT LCD, PDP and Mobile, the core industry in information society. In order to realize "Happy Company Growing with Others", all staffs of UJU Electronics Co., Ltd. is aimed at becoming the world-class precision connector maker, with a motto of "technology-based value management, earnings-based sound management and information-based transparent management". In order to reach this goal, we are reinforcing constant management innovation including TPS and Six Sigma, technology and competitiveness based on R&D competence.

Above all, we will try to be a company that grows along with customers by realizing customer satisfaction through the competitive price, best quality and excellent delivery, and creating customer value through high quality service and quick response to the market demand.

GROWTH COMPANY MAKING the FUTURE



VISION

World Class Maker of Connectors & Electronic Components

MISSION

- Enhanced Competence based on Knowledge
- Management Innovation based on profitability
- Marketing based on technology





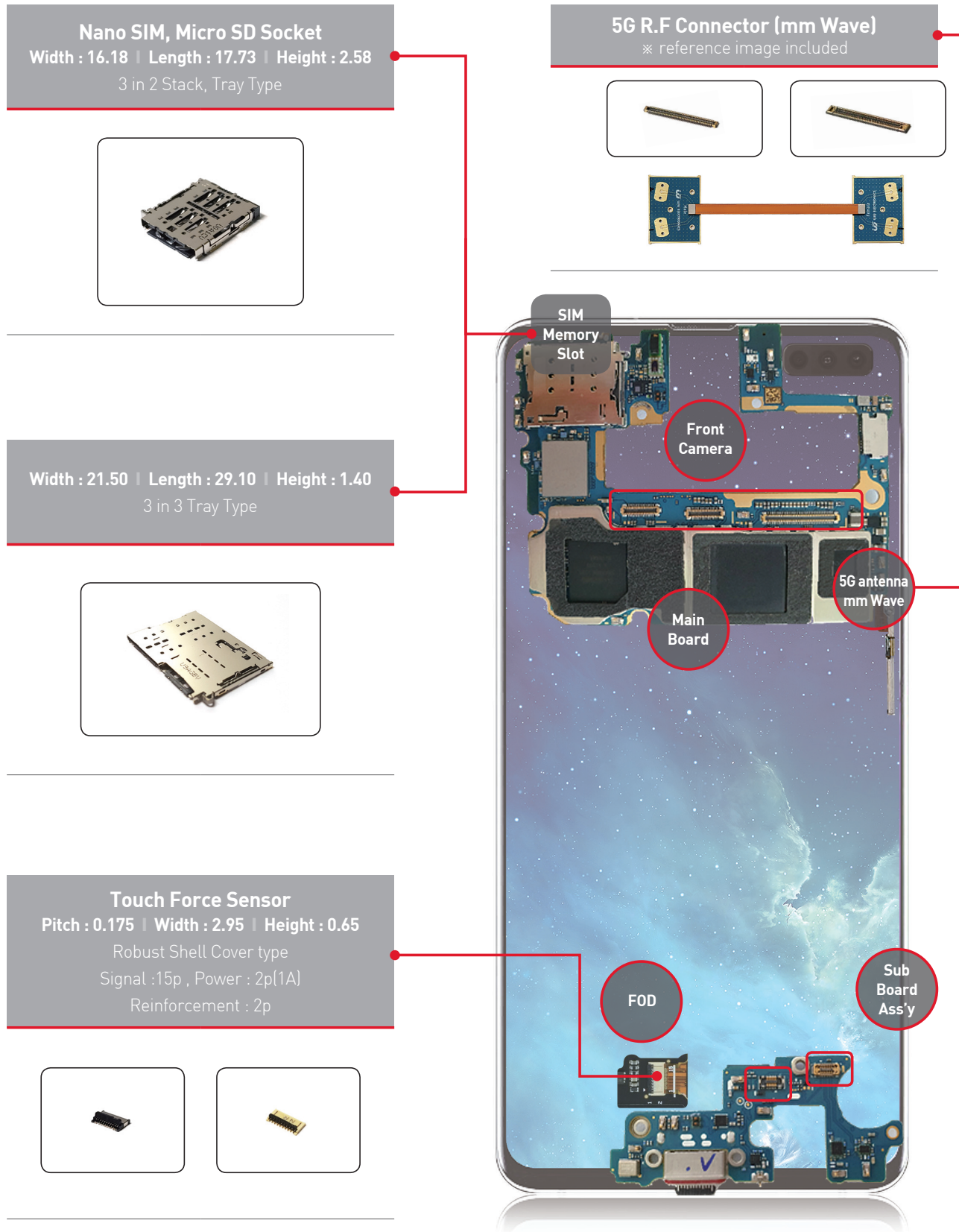
I T C O N N E C T O R

Leading to a competitive price and good quality UJU ELECTRONICS



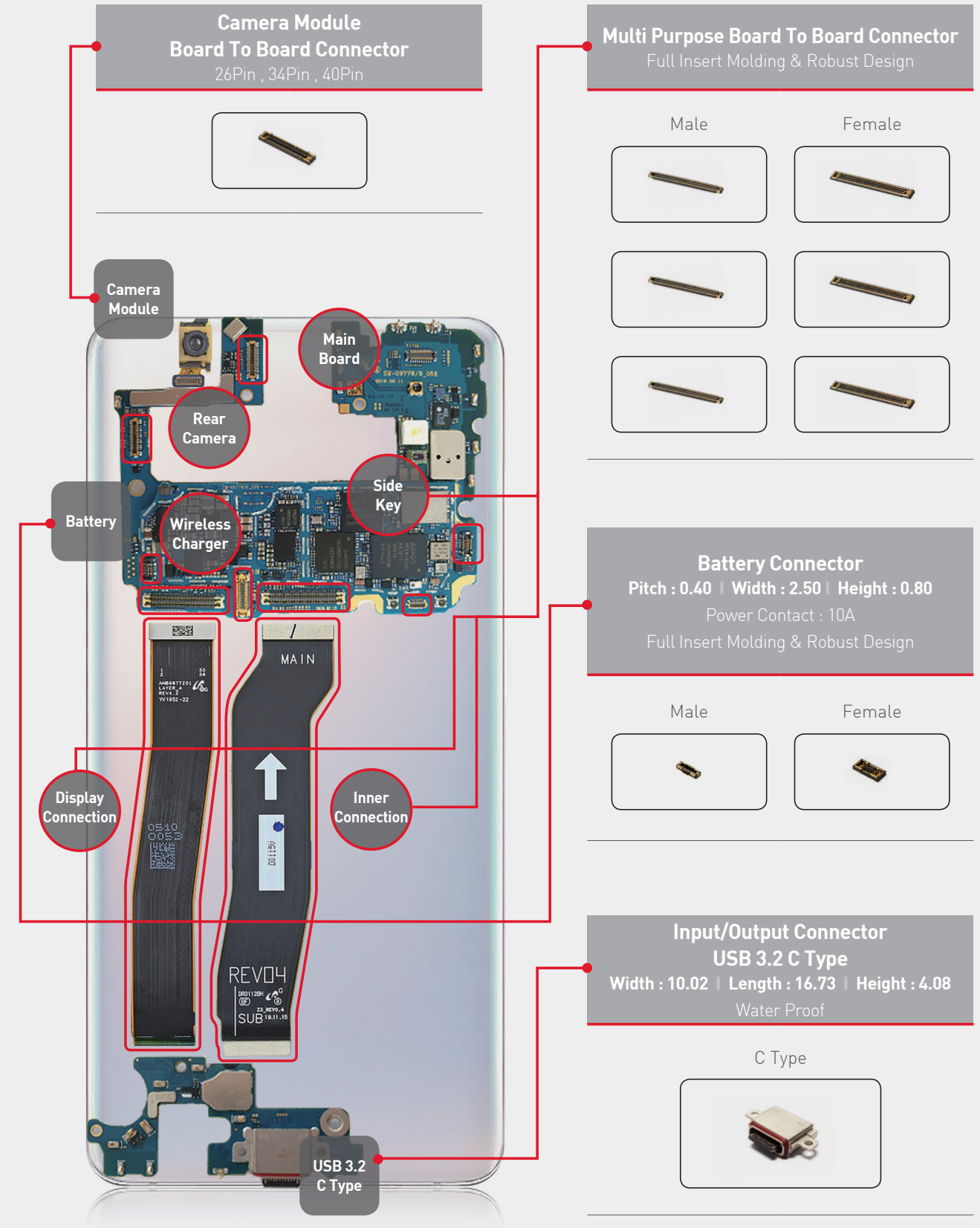
Application on Smartphone

Products & Technologies - Connector Division



Application on Smartphone

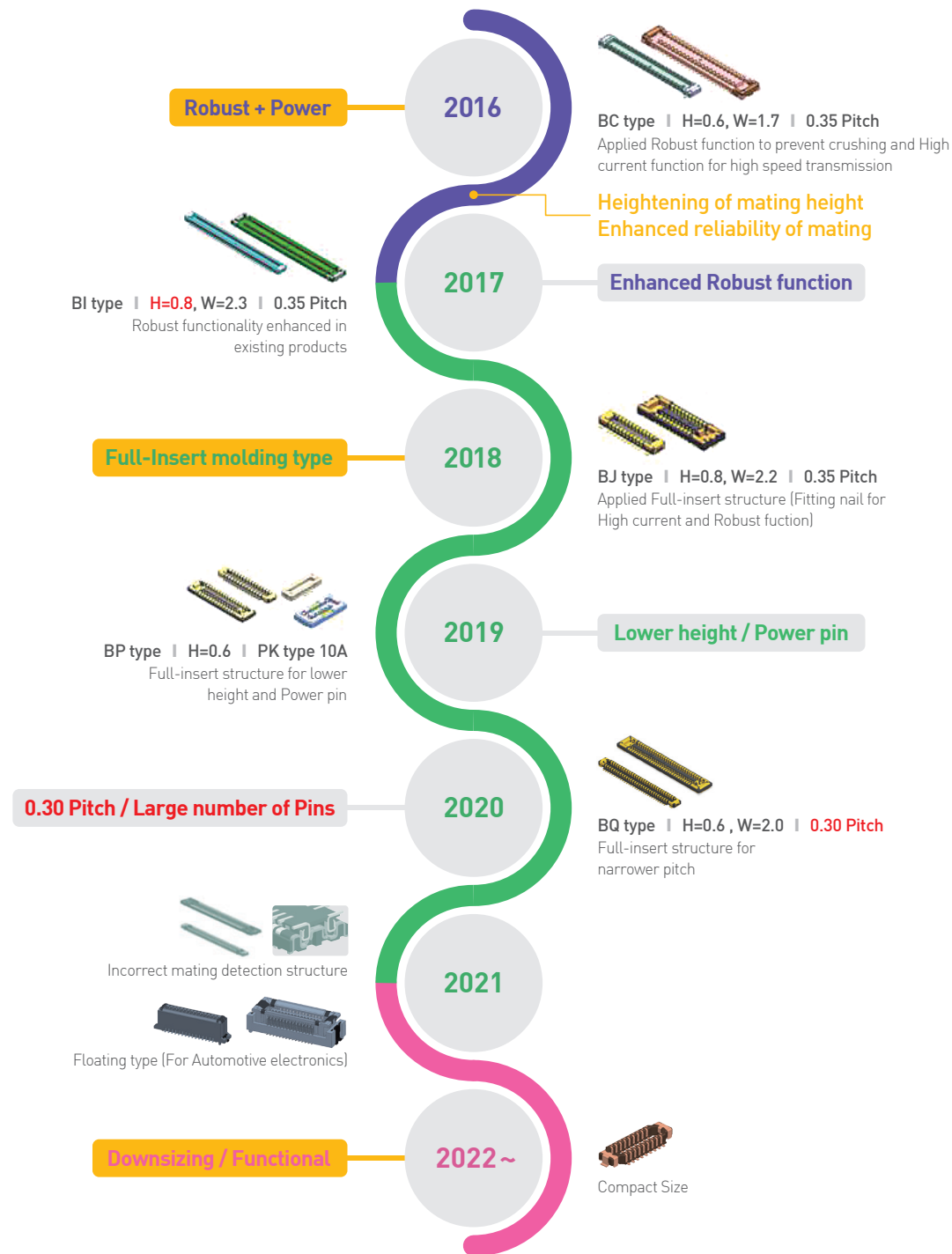
Products & Technologies - Connector Division



Board To Board Connector

Mobile Connector

Road Map



Board To Board Connector

Mobile Connector

*** : Available pins

Item	Pin	Pitch	Width	Height	Current (Reinforcement)	UJU P/N	Remark
	BQ 78P, 60P	0.30	2.00	0.60	5A/Pin	BM(F)030-I**B*C06-C	Display, Main Board, Sub Board, FPCB (For Inner Connection), etc
	BI 78P	0.35	2.30	0.8	3A/Pin	BM(F)035-I**B-C08-C	Display, Main Board, Sub Board, FPCB (For Inner Connection), etc
	BM 54P	0.35	2.20	0.8	5A/Pin	BM(F)035-I**B-C08-G	Display, Main Board, Sub Board, FPCB (For Inner Connection), etc
	BJ 20P, 40P	0.35	2.20	0.8	4A/Pin	BM(F)035-I**B-C08-D	Camera, Display, Main Board, Sub Board, FPCB (For Inner Connection), Sensor, etc
	BP 26P	0.35	1.90	0.6	5A/Pin	BM(F)035-I**B-C06-E	Camera, Sensor, etc
	BC 16P, 30P, 34P, 40P	0.35	1.70	0.6	4A/Pin	BM(F)035-I**B-C06-C	Camera, Display, Main Board, Sub Board, FPCB (For Inner Connection), Sensor, etc
	BR5 6P, 10P, 20P, 24P	0.35	1.70	0.6	Not Applicable	BM(F)035-I**B-C06-B	Camera, Sensor, Side Key, etc
	BR2 34P	0.35	2.50	0.8	Not Applicable	BM(F)035-I**B-C08	Camera, Display, Main Board, Sub Board, FPCB (For Inner Connection), etc
	BR1 24P, 30P, 34P, 48P, 60P	0.35	2.40	0.8	Not Applicable	BM(F)035-V**B-C08	Camera, Display, Main Board, Sub Board, FPCB (For Inner Connection), etc
	SW 10P, 12P, 16P, 24P, 30P, 34P	0.40	2.50	0.8	Not Applicable	BM(F)040-I**B-C08-A	Camera, Display, Main Board, Sub Board, FPCB (For Inner Connection), Snesor, etc
	RA 8P	0.35	2.40	0.7	Not Applicable	BM(F)035-I**B-C07-A	5G RF Antenna (mm Wave)

Board To Board Connector **BQ**

Mobile Connector

Female : BF030-I**B-C06-C **Male** : BM030-I**B-C06-C

Applications

- ▶ Smart Phone
- ▶ Smart Watch
- ▶ Tablet PC

Characteristics

- ▶ Full-Insert Structure
- ▶ Compact design and Smaller size



Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
Signal 0.3A/Pin Power 5.0A/Pin	Signal 50mΩ [Max.] Power 30mΩ [Max.]	250V AC(RMS)	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
60	0.30	2.00	0.60	11.90	Female : BF030-I**B-C06-C
78				14.60	Male : BM030-I**B-C06-C

Board To Board Connector **BQ**

Mobile Connector

Female : BF030-I**B-C06-C **Male** : BM030-I**B-C06-C

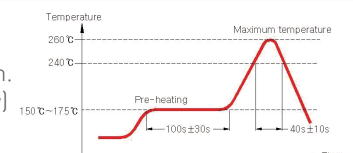
Product Specification

Ratings	Rated current	Signal : 0.3A/Pin Power : 5.0A/Pin	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35 °C
	Rated voltage	30V AC(RMS)/DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	- Signal : 50mΩ [Max.] - Power : 30mΩ [Max.]	- Open circuit voltage: 20mV [AC] - Test current: 1mA.
2. Insulation resistance	50MΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
6. Vibration	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	- Acceleration : 50G (490m/s ²) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.] 2) Insulation resistance : 25MΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)



Materials / Finish

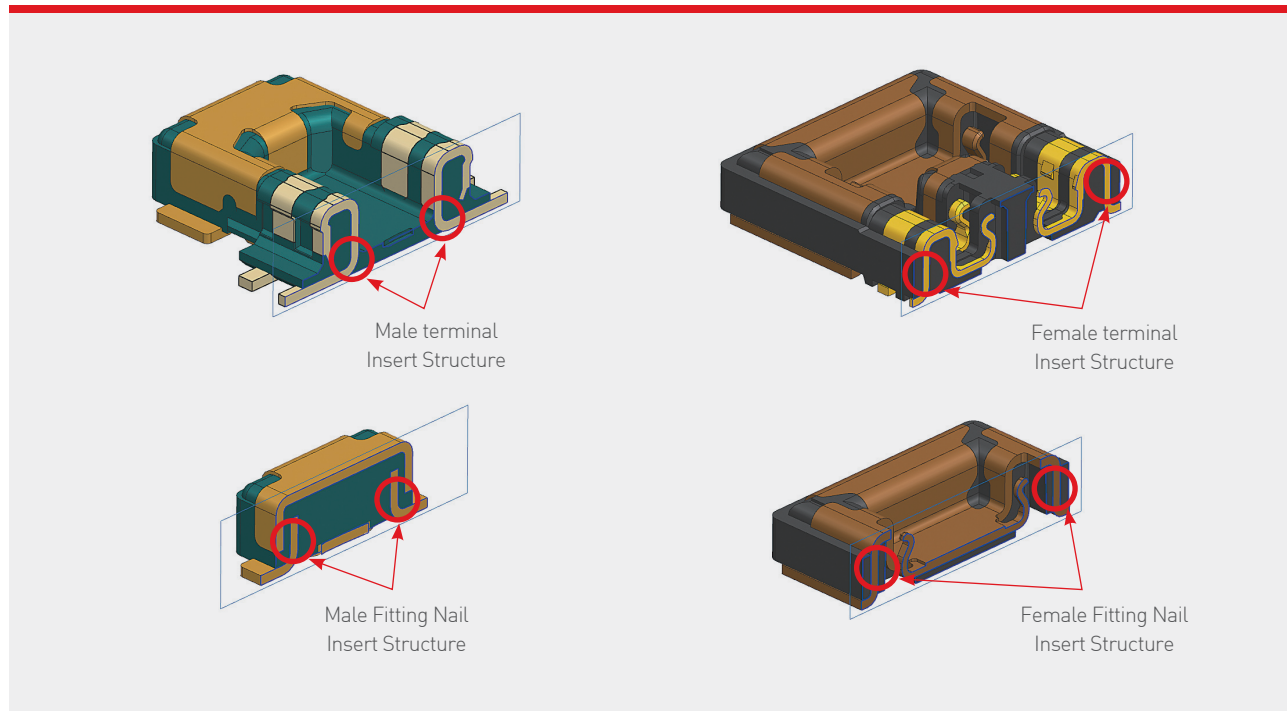
Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Phosphor Bronze	Au, Ni plated	-
Female Fitting Nail	Copper Alloy	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Copper Alloy	Au, Ni plated	-

Board To Board Connector **BQ**

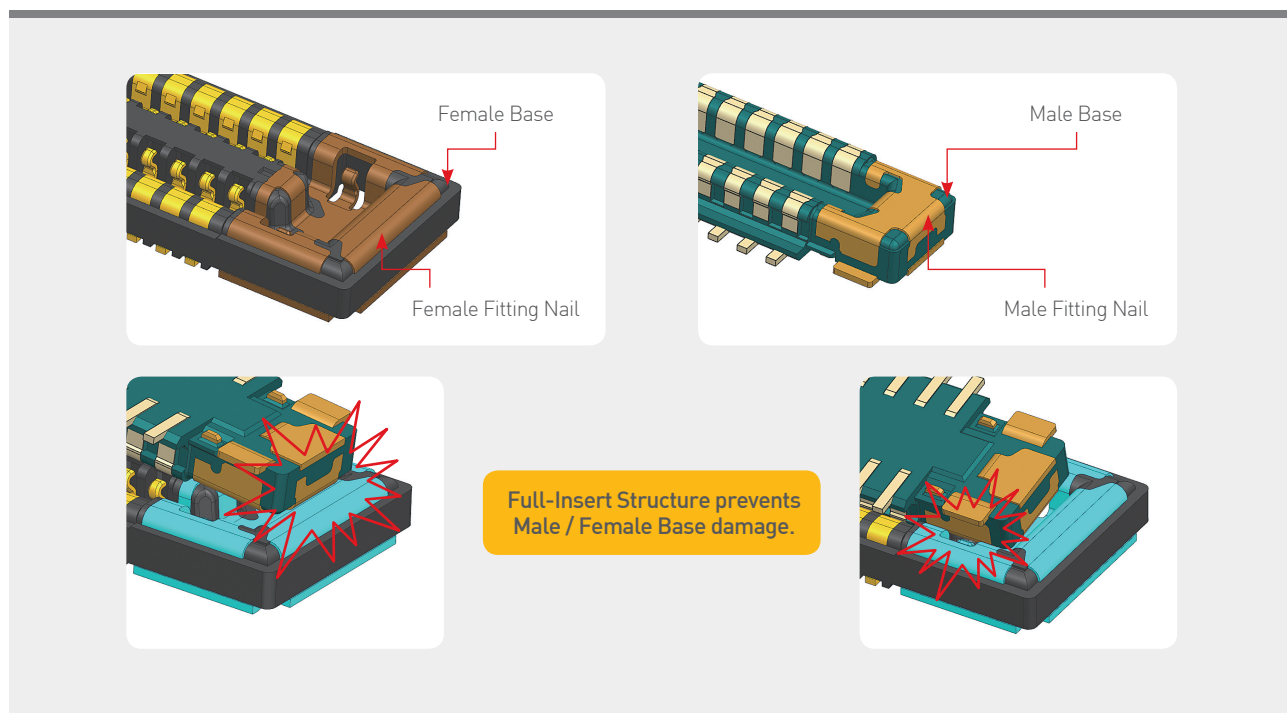
Mobile Connector

FEATURES AND ADVANTAGES

- ▶ Insert Structure for preventing Lead solder over rise



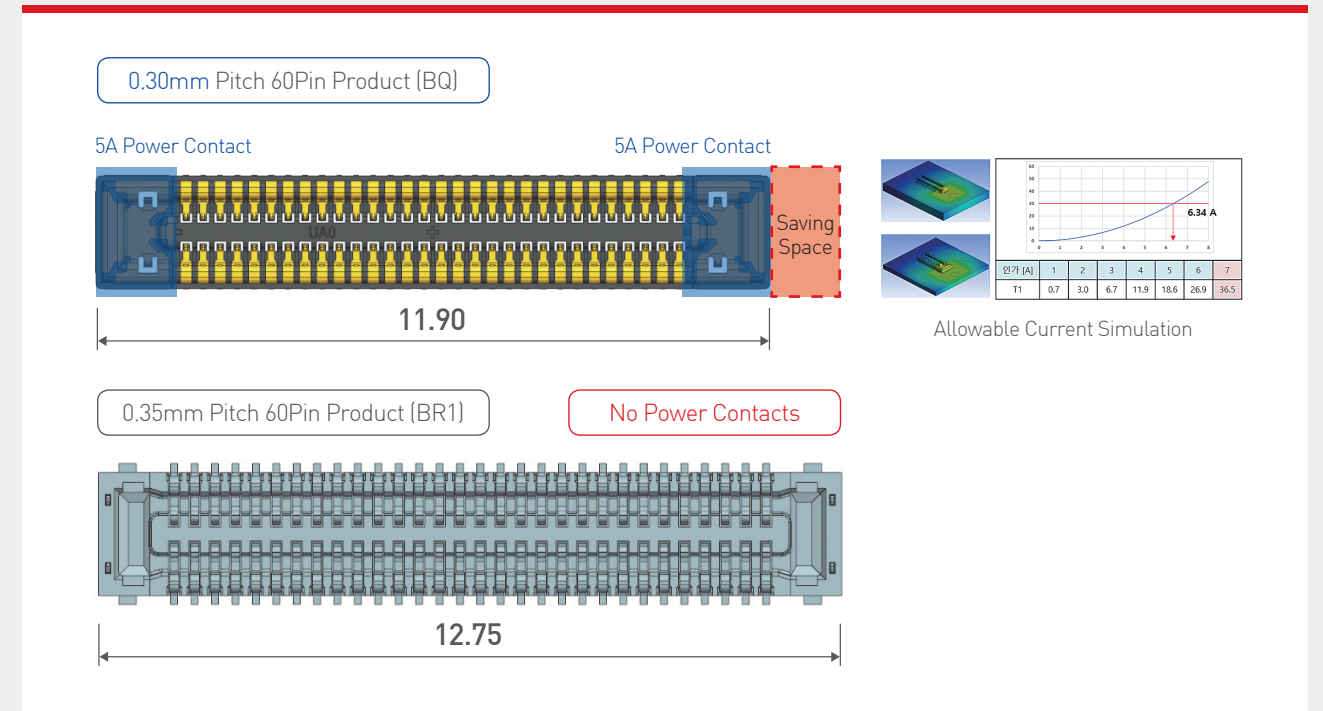
- ▶ Full-Insert Structure for prevention of Base damage



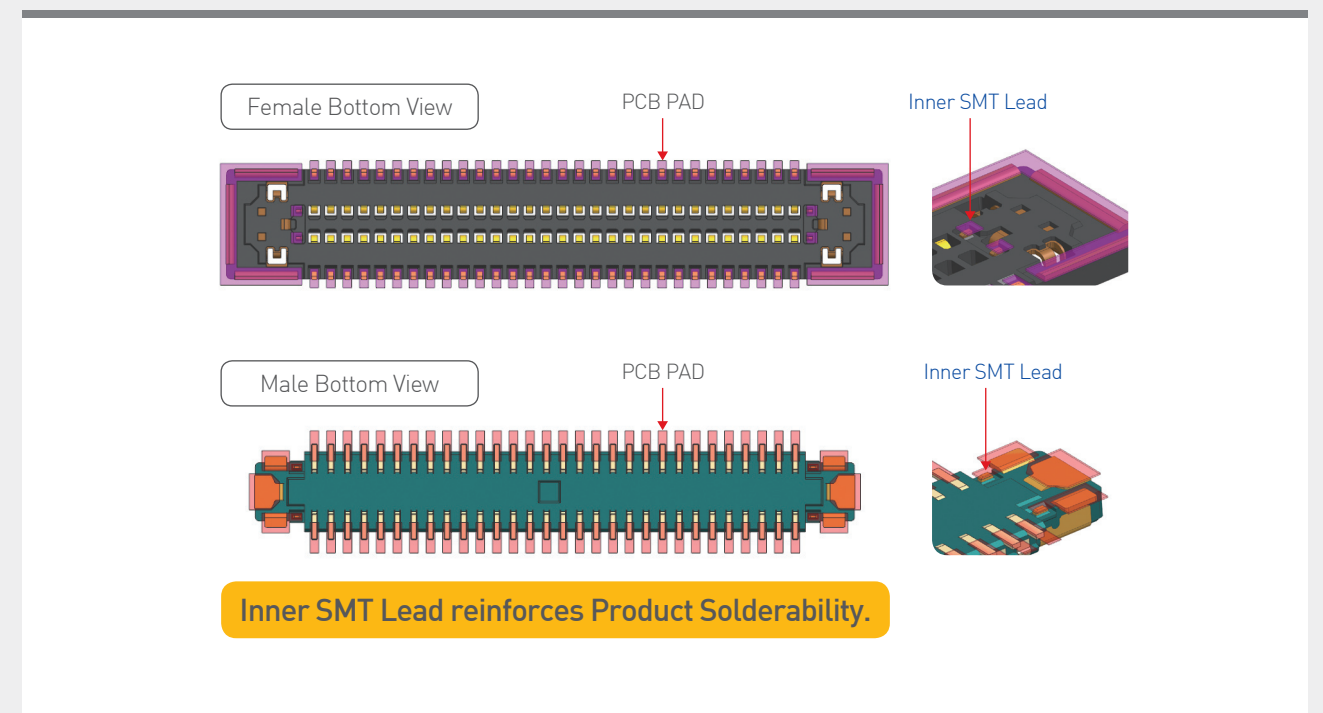
Board To Board Connector **BQ**

Mobile Connector

- ▶ 0.3mm narrow pitch for saving space
- ▶ High current (5A) for Power Contact



- ▶ Inner SMT Lead for reinforced Solder Peeling Strength



Board To Board Connector **BQ**

Mobile Connector

Female : BF030-I**B-C06-C Male : BM030-I**B-C06-C

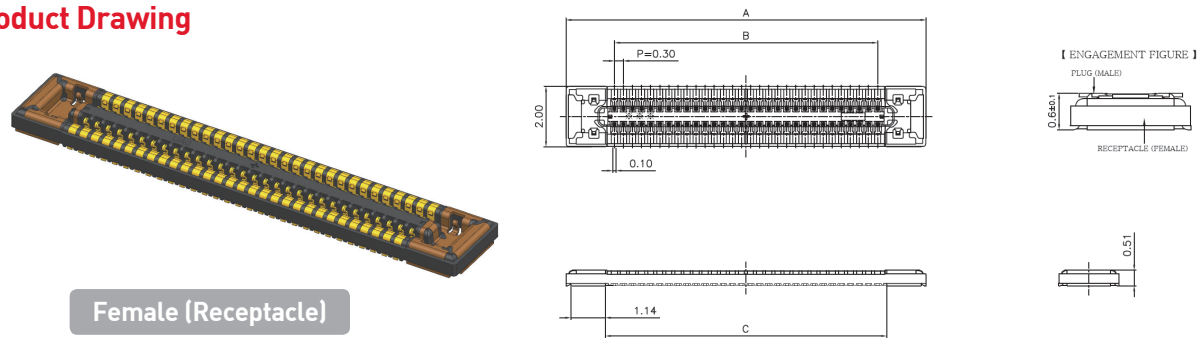
Product Number Structure

B **F** **030** - **I** **xx** **B** - **C** **06** - **C**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

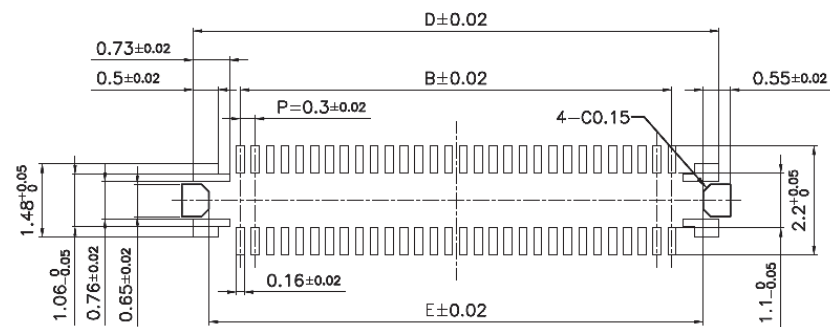
① Type of connectors : Board to Board	② Style : Female (Receptacle)
③ Contact Pitch : 0.30mm	④ Type : Insert
⑤ No. of position : 60P, 78P	⑥ Test of on board : Board on
⑦ Shape symbol : With Fitting Nail	⑧ Connector Height : 0.6mm
	⑨ Option

Product Drawing



Female [Receptacle]

Recommended PCB , Metal Mask Layout



RECOMMENDED PAD LAYOUT
(Metal Mask 개구부 Size 1:1 t0.08)

Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
BF030-I60B-C06-C	60	11.90	8.70	9.30	12.10	9.14
BF030-I78B-C06-C	78	14.60	11.40	12.00	14.80	11.84

Note 1 : Please place orders in full reel quantities. (1Reel = 20,000ea)

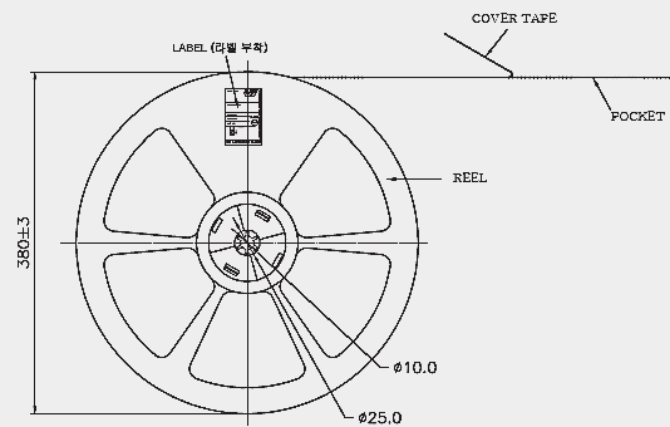
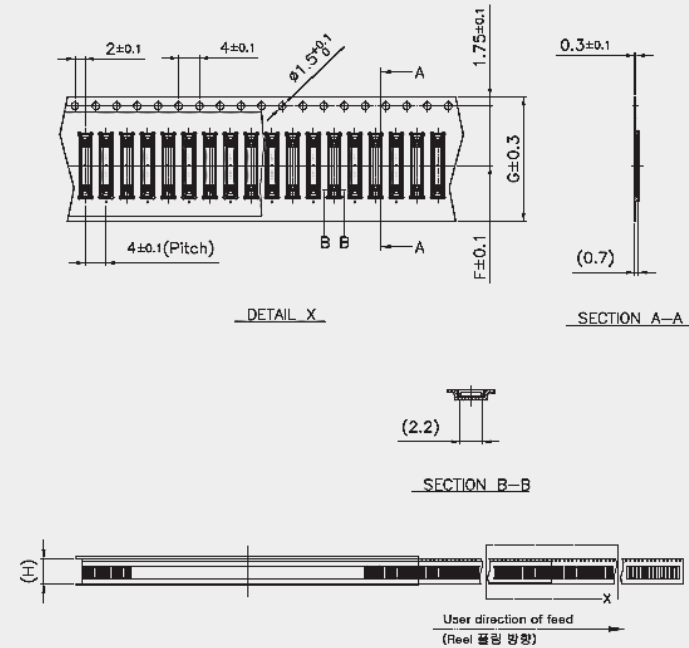
Note 2 : This connector has no polarity.

Board To Board Connector **BQ**

Mobile Connector

Female : BF030-I**B-C06-C Male : BM030-I**B-C06-C

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	F	G	H
BF030-I60B-C06-C	60	11.50	24.00	25.40
BF030-I78B-C06-C	78	11.50	24.00	25.40

Note 1 : Please place orders in full reel quantities. (1Reel = 20,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BQ**

Mobile Connector

Female : BF030-I**B-C06-C Male : BM030-I**B-C06-C

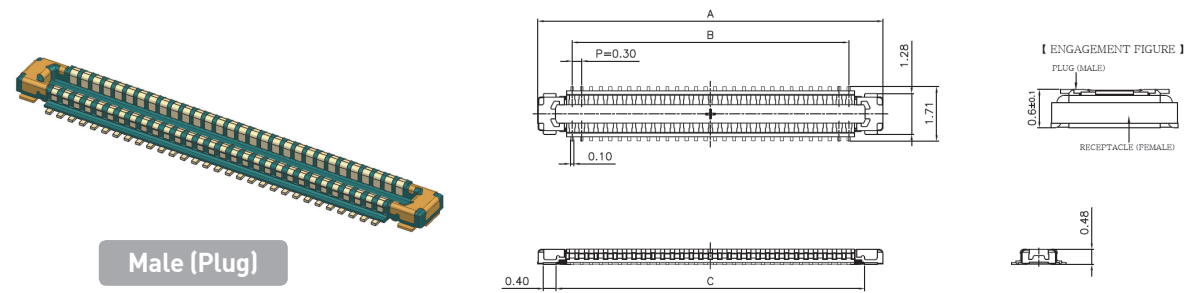
Product Number Structure

BM 030 - I xx B - C 06 - C

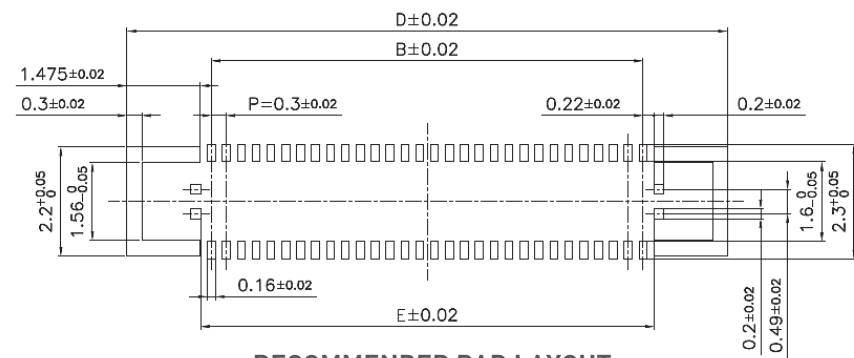
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Male (Plug)
- ③ Contact Pitch : 0.30mm
- ④ Type : Insert
- ⑤ No. of position : 60P, 78P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.6mm
- ⑨ Option

Product Drawing



Recommended PCB , Metal Mask Layout



RECOMMENDED PAD LAYOUT
(Metal Mask 개구부 Size 1:1 to 0.08)

Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
BF030-I60B-C06-C	60	10.86	8.70	9.70	10.60	9.96
BF030-I78B-C06-C	78	13.56	11.40	12.40	13.30	12.66

Note 1 : Please place orders in full reel quantities. (1Reel = 20,000ea)

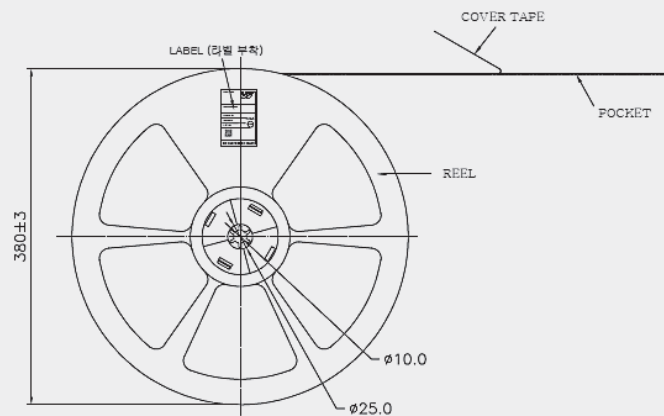
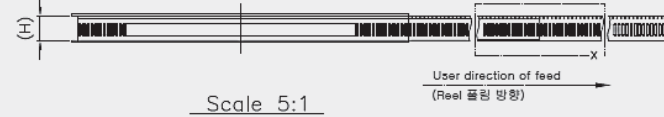
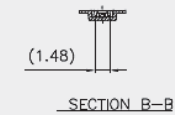
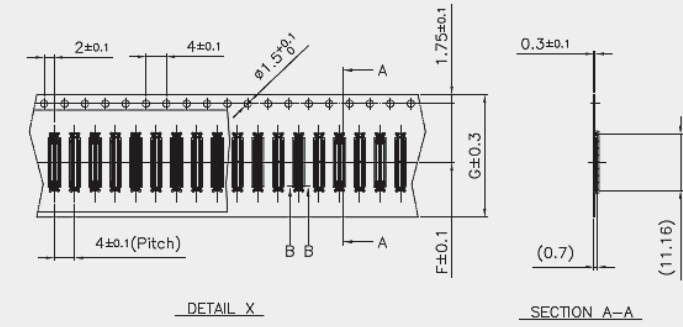
Note 2 : This connector has no polarity.

Board To Board Connector **BQ**

Mobile Connector

Female : BF030-I**B-C06-C Male : BM030-I**B-C06-C

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	F	G	H
BF030-I60B-C06-C	60	11.50	24.00	25.40
BF030-I78B-C06-C	78	11.50	24.00	25.40

Note 1 : Please place orders in full reel quantities. (1Reel = 20,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BI**

Mobile Connector

Female : BF035-I78B-C08-C **Male** : BM035-I78B-C08-C

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Functional Fitting nail
- ▶ Compact design and Smaller size



Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
Signal 0.3A/Pin Power 3.0A/Pin	Signal 50mΩ [Max.] Power 10mΩ [Max.]	250V AC(RMS)	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
78	0.35	2.30	0.80	16.65	Female : BF035-I78B-C08-C Male : BM035-I78B-C08-C

Board To Board Connector **BI**

Mobile Connector

Female : BF035-I78B-C08-C **Male** : BM035-I78B-C08-C

Product Specification

Ratings	Rated current	Signal : 0.3A/Pin Power : 3.0A/Pin	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35°C
	Rated voltage	30V AC(RMS)/DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	- Signal : 50mΩ [Max.] - Power : 10mΩ [Max.]	- Open circuit voltage: 20mV [AC] - Test current: 1mA.
2. Insulation resistance	50MΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	1) Contact resistance - Signal : 70mΩ [Max.] - Power : 20mΩ [Max.]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 70mΩ [Max.] - Power : 20mΩ [Max.]	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 70mΩ [Max.] - Power : 20mΩ [Max.]	- Acceleration : 50G (490m/s ²) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance - Signal : 70mΩ [Max.] - Power : 20mΩ [Max.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)

Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Phosphor Bronze	Au, Ni plated	-
Female Fitting Nail	Copper Alloy	Au, Ni plated	-
Female Inner Nail	Copper Alloy	Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Copper Alloy	Au, Ni plated	-

Board To Board Connector **BI**

Mobile Connector

Female : BF035-I78B-C08-C Male : BM035-I78B-C08-C

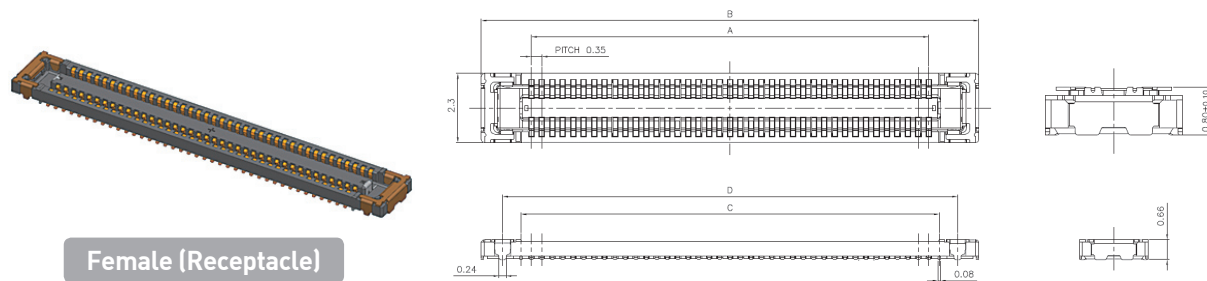
Product Number Structure

B **F** **035** - **I** **78** **B** - **C** **08** - **C**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

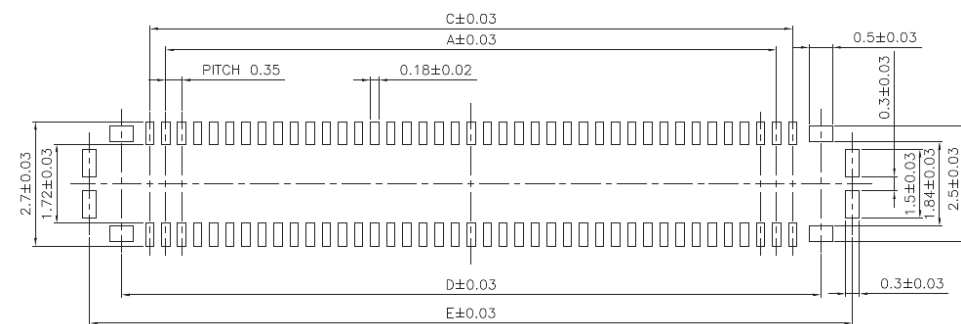
- ① Type of connectors : Board to Board
- ② Style : Female (Receptacle)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 78P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm
- ⑨ Option

Product Drawing



Female (Receptacle)

Recommended PCB, Metal Mask Layout



RECOMMENDED PAD LAYOUT
(Metal Mask 개구부 Size 1:1 t0.08)

Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
BF035-I78B-C08-C	78	13.30	16.65	14.00	15.23	16.61

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

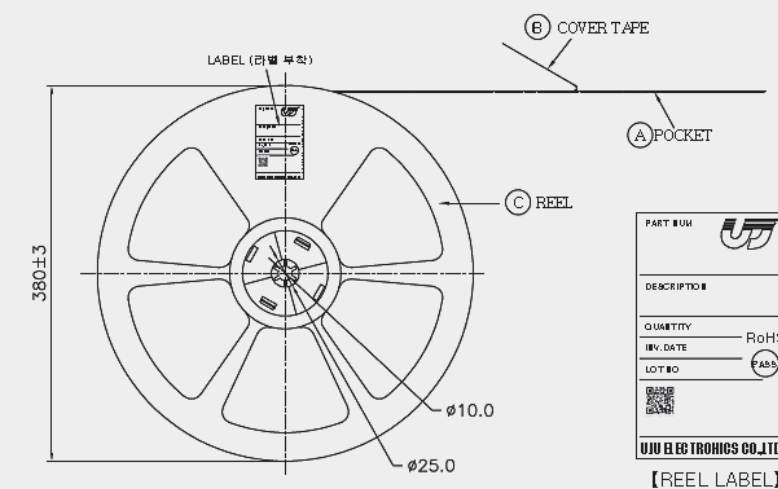
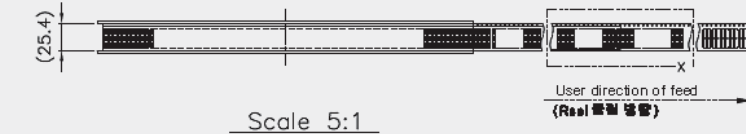
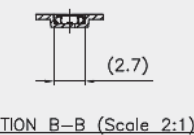
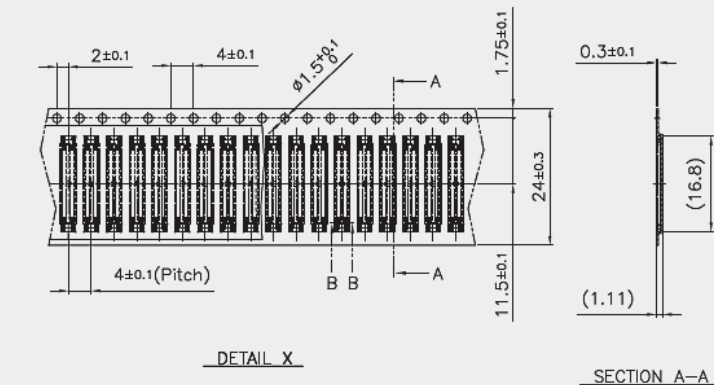
Note 2 : This connector has no polarity.

Board To Board Connector **BI**

Mobile Connector

Female : BF035-I78B-C08-C Male : BM035-I78B-C08-C

Embossed Tape Dimensions



Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BI**

Mobile Connector

Female : BF035-I78B-C08-C Male : BM035-I78B-C08-C

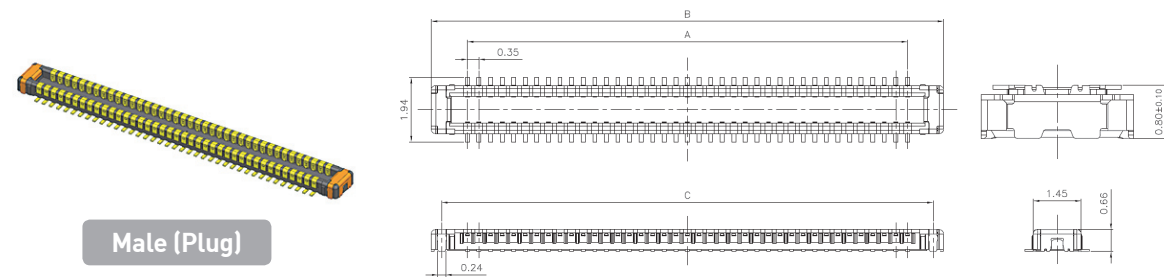
Product Number Structure

BM 035 - I 78 B - C 08 - C

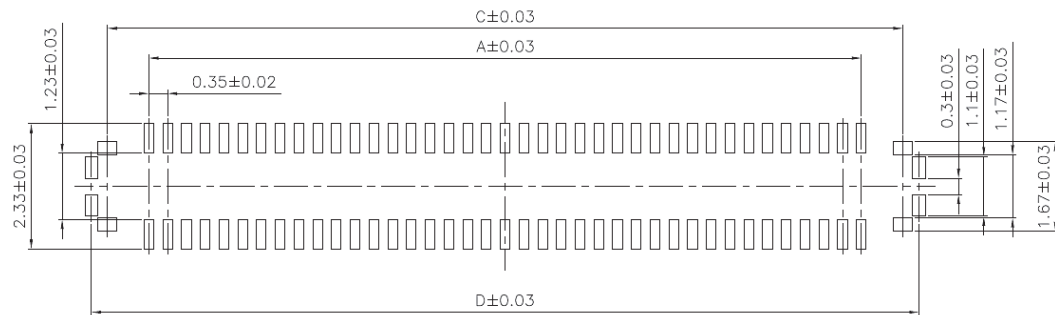
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Male (Plug)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 78P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm
- ⑨ Option

Product Drawing



Recommended PCB , Metal Mask Layout



RECOMMENDED PAD LAYOUT
(Metal Mask 개구부 Size 1:1 t0.08)

Unit : mm

Product No.	No. of Contacts	A	B	C	D
BM035-I78B-C08-C	78	13.30	15.49	14.85	15.45

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

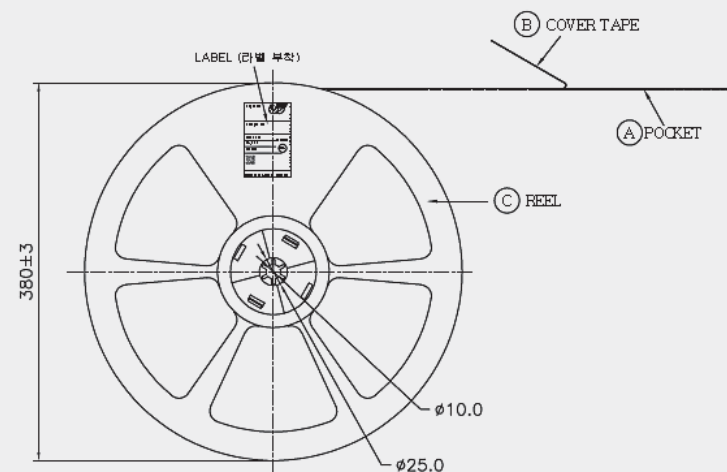
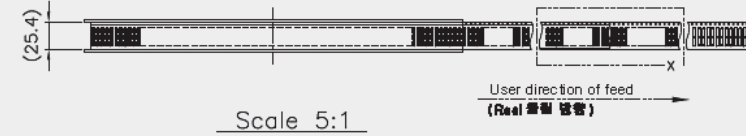
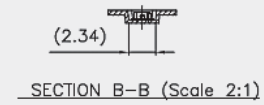
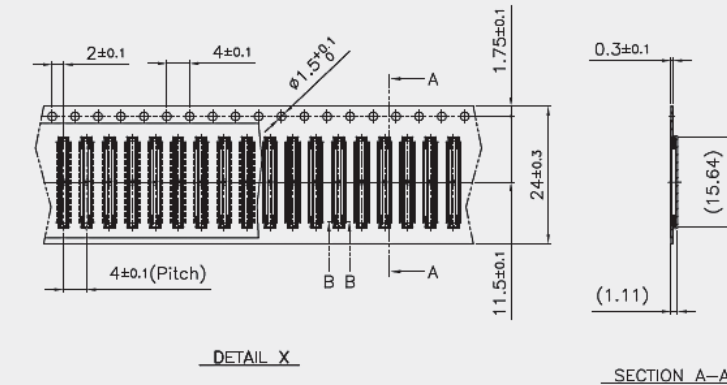
Note 2 : This connector has no polarity.

Board To Board Connector **BI**

Mobile Connector

Female : BF035-I78B-C08-C Male : BM035-I78B-C08-C

Embossed Tape Dimensions



Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BM**

Mobile Connector

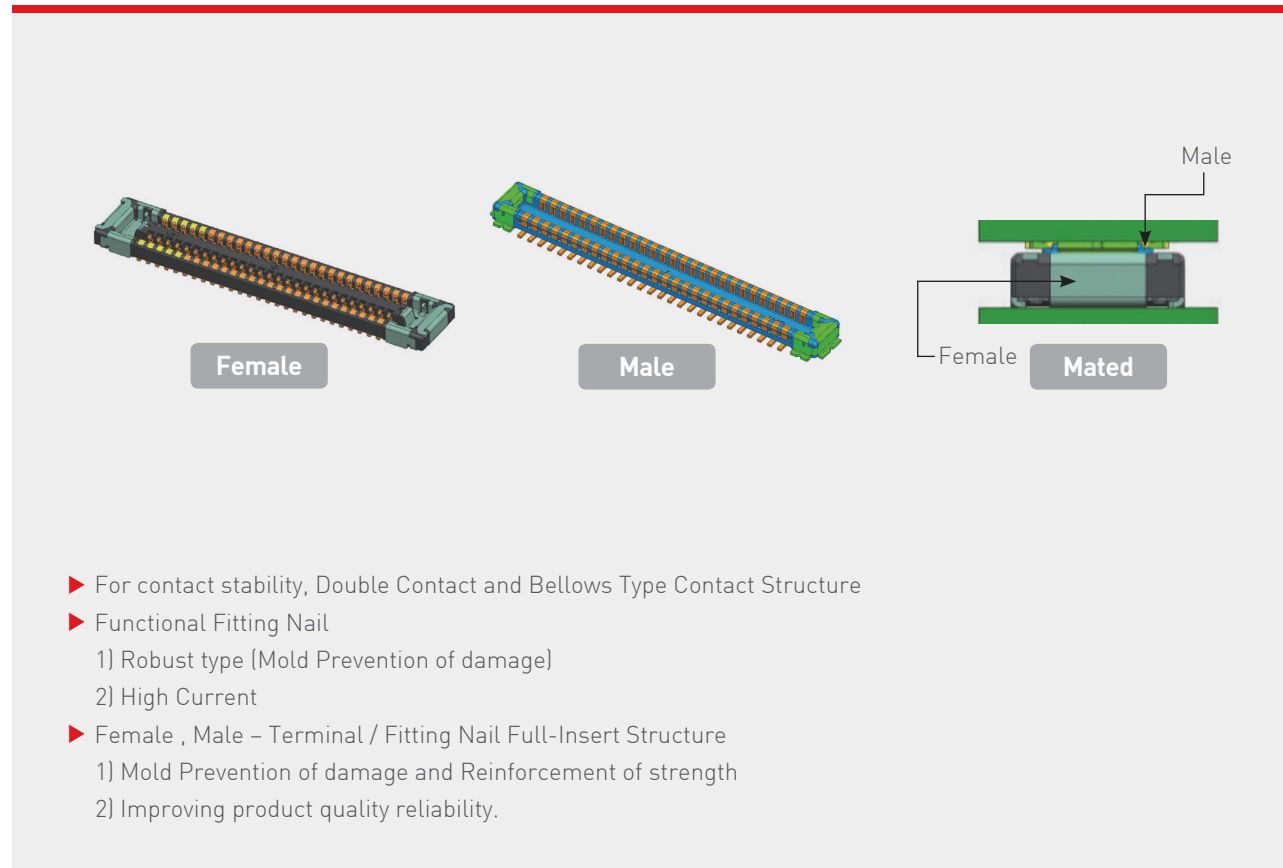
Female : BF035-I54B-C08-G **Male** : BM035-I54B-C08-G

Applications

- ▶ Smart Phone
- ▶ Smart Watch
- ▶ Tablet PC

Characteristics

- ▶ Full-Insert Structure
- ▶ Compact design and Smaller size



Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
Signal 0.3A/Pin Power 5.0A/Pin	Signal 50mΩ [Max.] Power 30mΩ [Max.]	250V AC(RMS)	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
54	0.35	2.20	0.8	12.5	Female : BF035-I54B-C08-G Male : BM035-I54B-C08-G

Board To Board Connector **BM**

Mobile Connector

Female : BF035-I54B-C08-G **Male** : BM035-I54B-C08-G

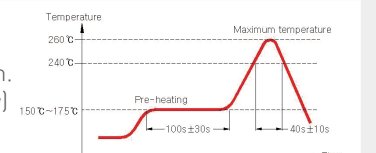
Product Specification

Ratings	Rated current	Signal : 0.3A/Pin Power : 5.0A/Pin	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35°C
	Rated voltage	30V AC(RMS)/DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	- Signal : 50mΩ [Max.] - Power : 30mΩ [Max.]	- Open circuit voltage: 20mV [AC] - Test current: 1mA.
2. Insulation resistance	50MΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
6. Vibration	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	- Vibration frequency range : 10-55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	- Acceleration : 50G (490m/s ²) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.] 2) Insulation resistance : 25MΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Phosphor Bronze	Au, Ni plated	-
Female Fitting Nail	Copper Alloy	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Copper Alloy	Au, Ni plated	-

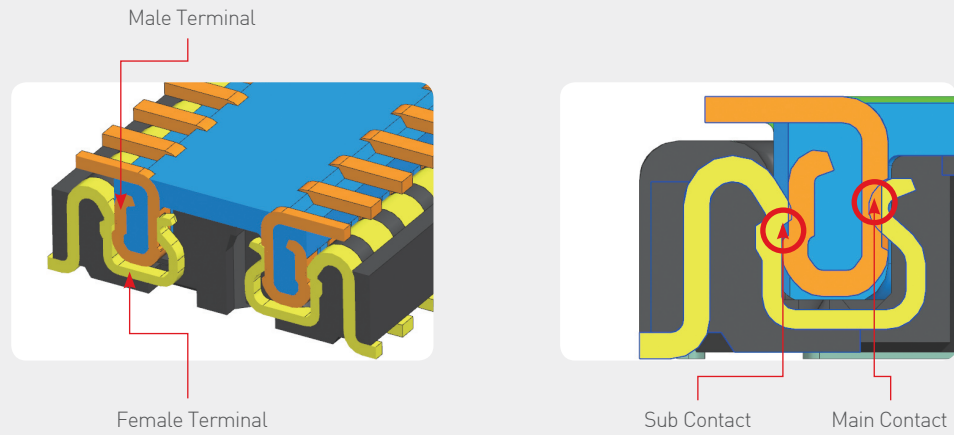
Board To Board Connector **BM**

Mobile Connector

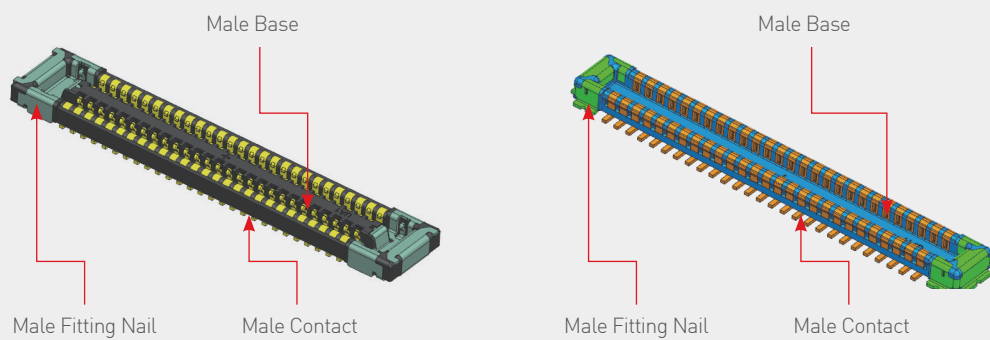
Female : BF035-I54B-C08-G Male : BM035-I54B-C08-G

FEATURES AND ADVANTAGES

► Double Contact point for stable contact preservation



► Insert mold Structure



Board To Board Connector **BM**

Mobile Connector

Female : BF035-I54B-C08-G Male : BM035-I54B-C08-G

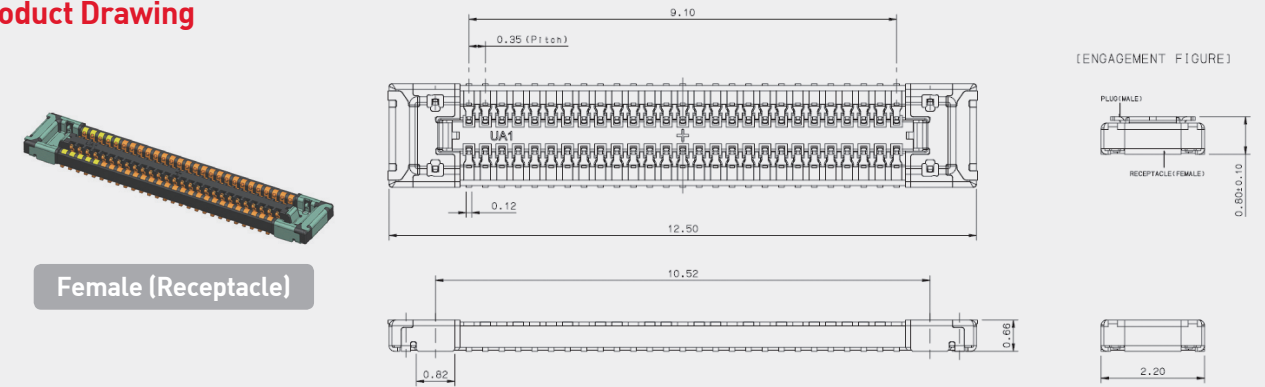
Product Number Structure

B **F** **035** - **I** **54** **B** - **C** **08** - **G**

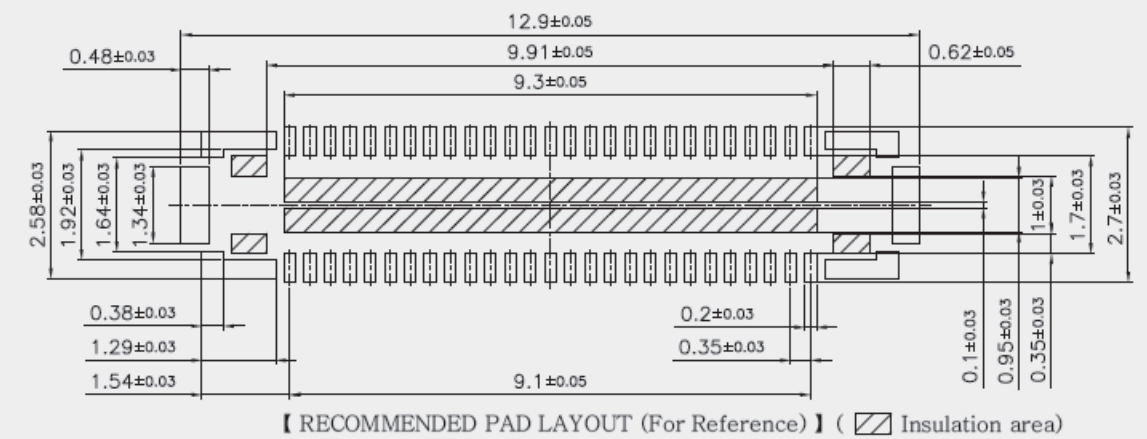
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- | | |
|---------------------------------------|-------------------------------|
| ① Type of connectors : Board to Board | ② Style : Female (Receptacle) |
| ③ Contact Pitch : 0.35mm | ④ Type : Insert |
| ⑤ No. of position : 54P | ⑥ Test of on board : Board on |
| ⑦ Shape symbol : With Fitting Nail | ⑧ Connector Height : 0.8mm |
| | ⑨ Option |

Product Drawing



Recommended PCB , Metal Mask Layout



Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

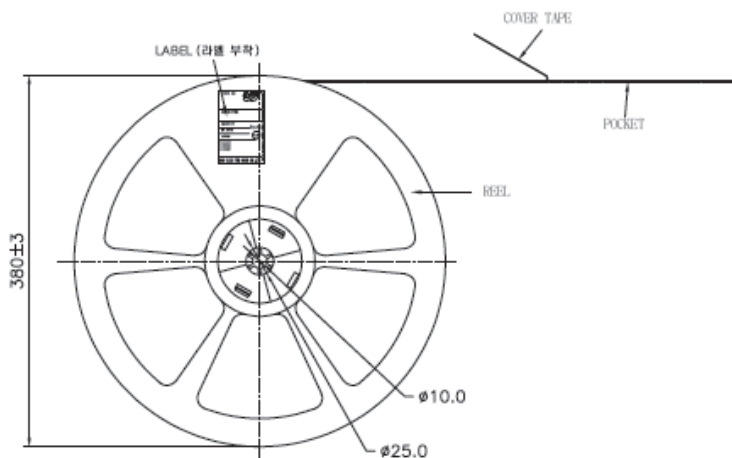
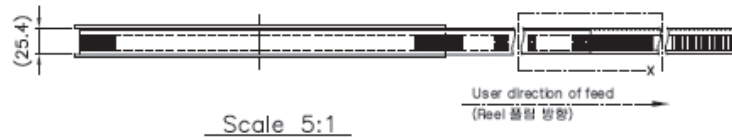
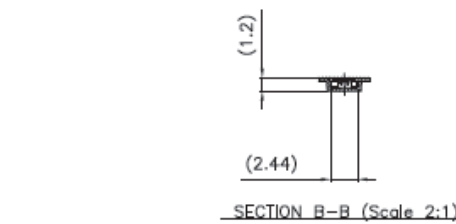
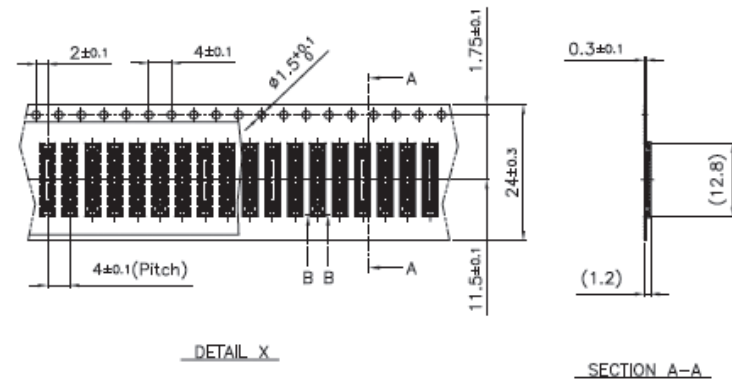
Note 2 : This connector has no polarity.

Board To Board Connector **BM**

Mobile Connector

Female : BF035-I54B-C08-G Male : BM035-I54B-C08-G

Packing Drawing



Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)
 Note 2 : This connector has no polarity.

Board To Board Connector **BM**

Mobile Connector

Female : BF035-I54B-C08-G Male : BM035-I54B-C08-G

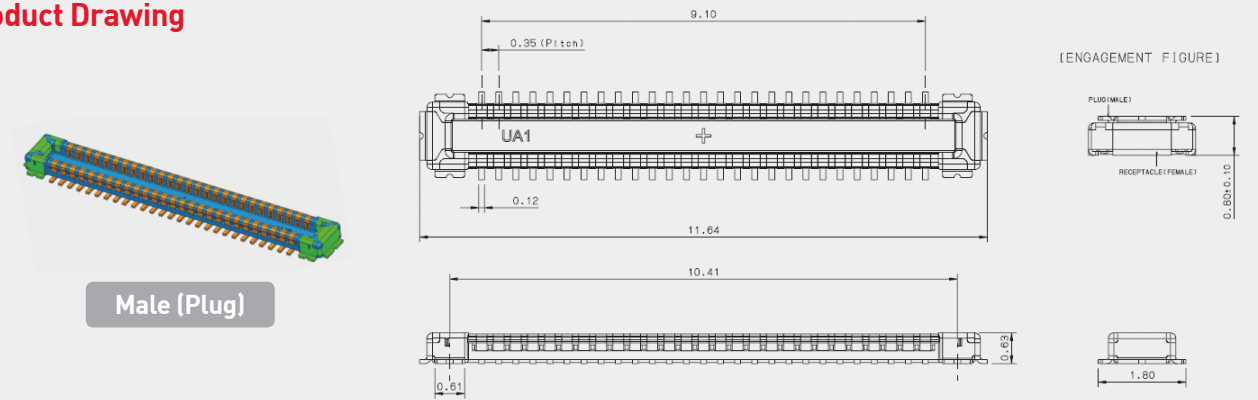
Product Number Structure

BM 035 - I 54 B - C 08 - G

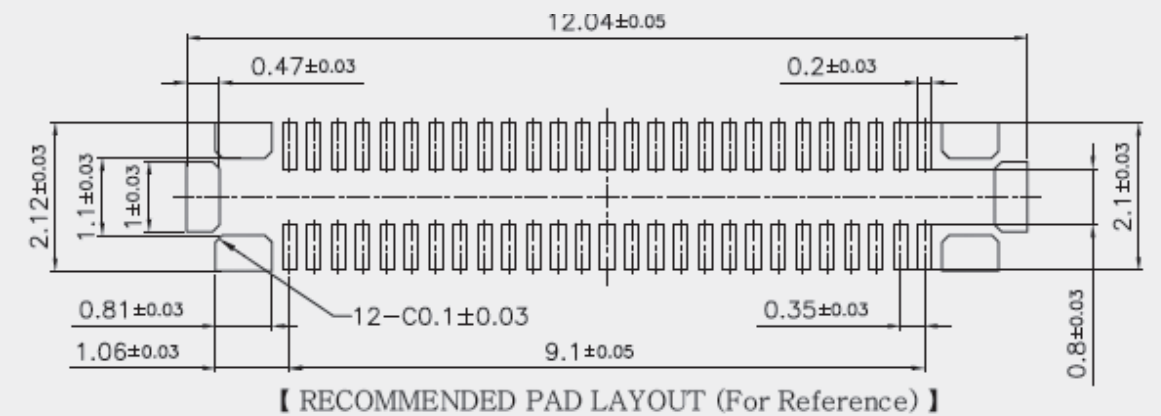
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Type of connectors : Board to Board	② Style : Male (Plug)
③ Contact Pitch : 0.35mm	④ Type : Insert
⑤ No. of position : 54P	⑥ Test of on board : Board on
⑦ Shape symbol : With Fitting Nail	⑧ Connector Height : 0.8mm
	⑨ Option

Product Drawing



Recommended PCB , Metal Mask Layout



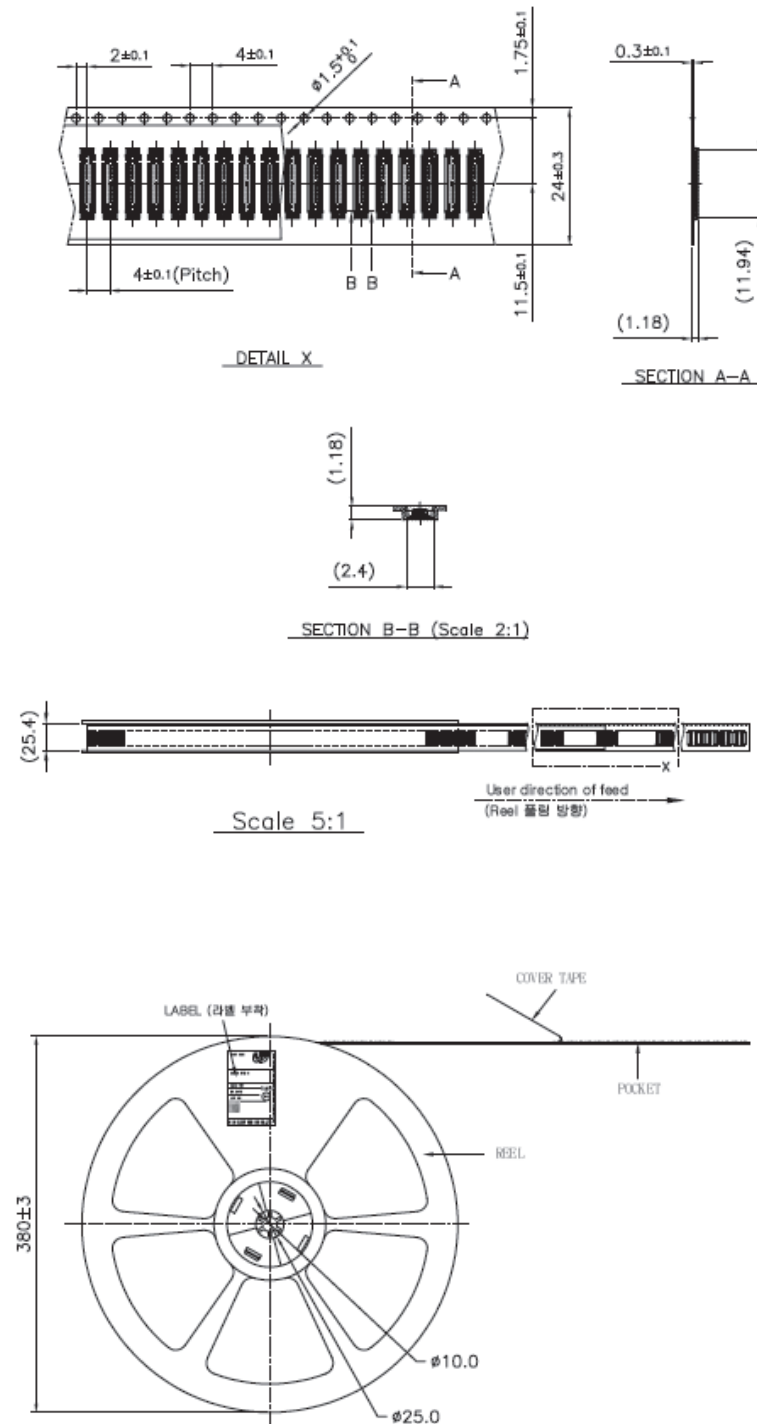
Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)
 Note 2 : This connector has no polarity.

Board To Board Connector **BM**

Mobile Connector

Female : BF035-I54B-C08-G Male : BM035-I54B-C08-G

Packing Drawing



Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BJ**

Mobile Connector

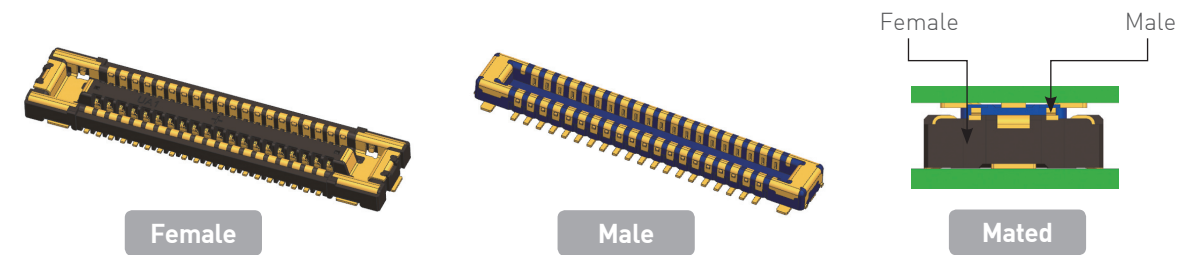
Female : BF035-I**B-C08-D Male : BM035-I**B-C08-D

Applications

- ▶ Smart Phone
- ▶ Smart Watch
- ▶ Tablet PC

Characteristics

- ▶ Full-Insert Structure
- ▶ Compact design and Smaller size



- ▶ For contact stability, Double Contact and Bellows Type Contact Structure
- ▶ Functional Fitting Nail
 - 1) Robust type (Mold Prevention of damage)
 - 2) High Current
- ▶ FEMALE , MALE - Terminal / Fitting Nail Full-Insert Structure
 - 1) Mold Prevention of damage and Reinforcement of strength
 - 2) Improving product quality reliability.

Specifications

Current Rating	Contact Resistance	Dielectric Strength	Temperature Range
Signal 0.3A/Pin Power 3.0A/Pin	Signal 50mΩ [Max.] Power 10mΩ [Max.]	AC 250V	-35°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	Product No.
20	0.35	2.20	0.8	6.86	Female : BF035-I**B-C08-D Male : BM035-I**B-C08-D
40				10.36	

Board To Board Connector **BJ**

Mobile Connector

Female : BF035-I**B-C08-D Male : BM035-I**B-C08-D

Product Specification

Ratings	Rated current	Signal : 0.3A/Pin Power : 4.0A/Pin	Operating temperature range	-35°C to +85°C 1	Storage temperature range	-10°C to +60°C (Product only)
	Rated voltage	Max 30V AC(RMS) or DC	Operating humidity range	85%RH Max.2	Storage humidity range	65%RH Max. 2

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	- Signal : 50mΩ [Max.] - Power : 30mΩ [Max.]	- Open circuit voltage: 20mV [AC] - Test current: 1mA.
2. Insulation resistance	50MΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	1) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	- Vibration frequency range : 10-55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	- Acceleration : 50G (490m/s ²) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.] 2) Insulation resistance : 25MΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr

9. Solder heat resistance No loose contacts no deformation.

Reflow condition. (Refer to Reflow)

Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Phosphor Bronze	Au, Ni plated	-
Female Fitting Nail	Copper Alloy	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Copper Alloy	Au, Ni plated	-

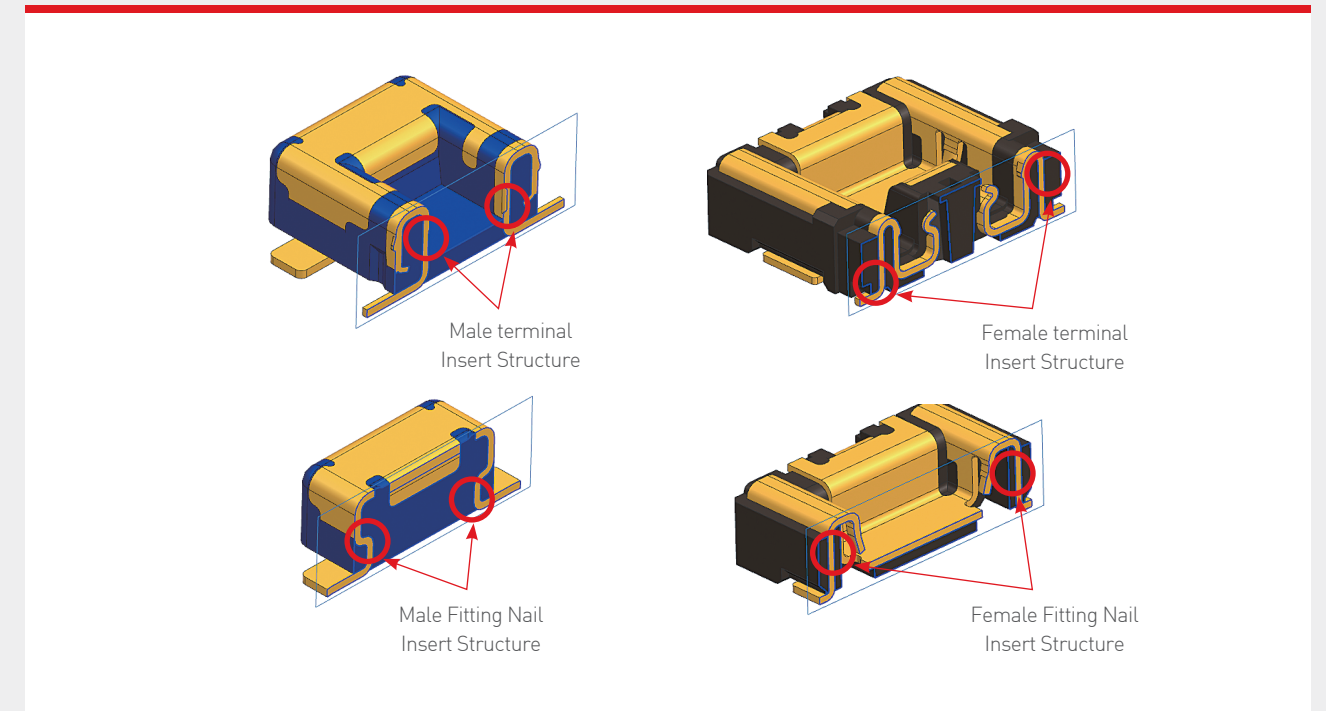
Board To Board Connector **BJ**

Mobile Connector

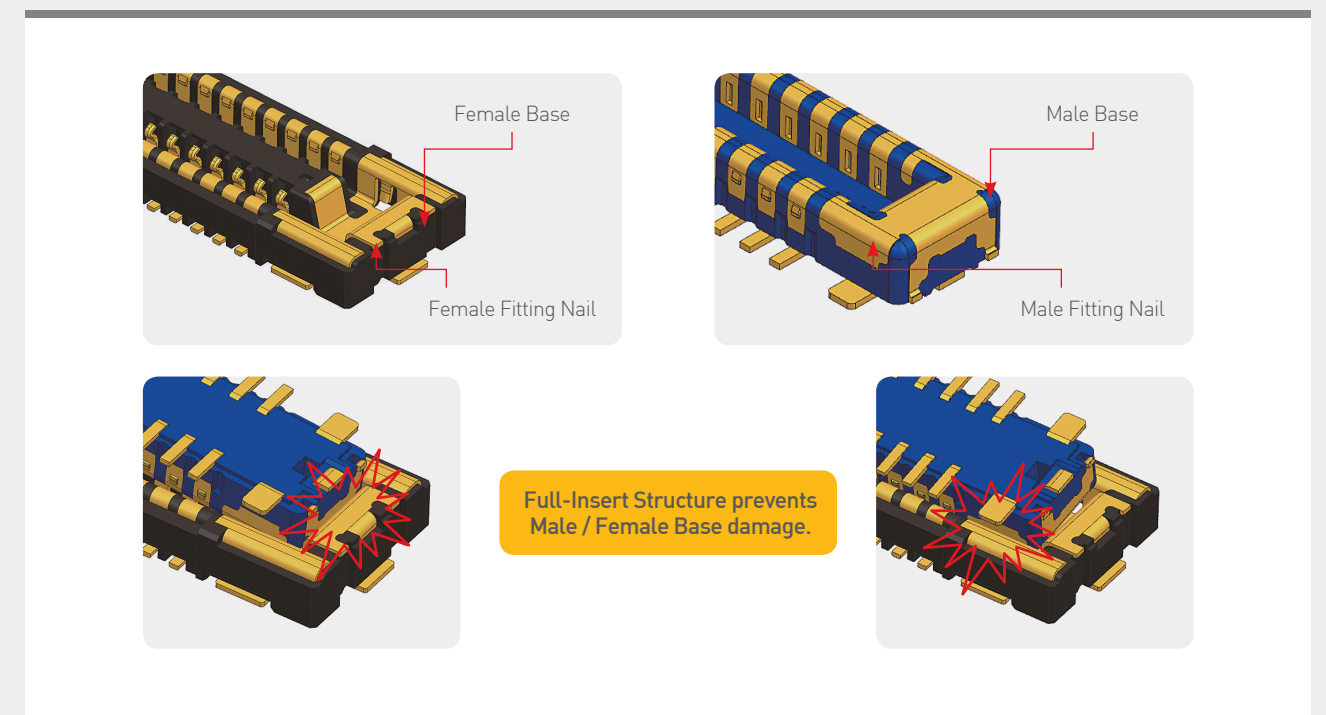
Female : BF035-I**B-C08-D Male : BM035-I**B-C08-D

FEATURES AND ADVANTAGES

► Insert Structure for preventing Lead solder over rise



► Full-Insert Structure for prevention of Base damage



Board To Board Connector **BJ**

Mobile Connector

Female : BF035-I**B-C08-D Male : BM035-I**B-C08-D

▶ High current(4A) for Power Contact

4A Power Contact

Female (Receptacle)

4A Power Contact

Male (Plug)

허용전류(A)	1	2	3	4	5	6	7	ΔT = 30 °C
ΔTemperature(°C)	0	0	8.3	21.7	38.9	60.0	85.0	4.51 A

Allowable Current Simulation

▶ Three Fitting Nail Leads for reinforced Solder Peeling Strength

BR1

Female (Receptacle)

2 Mounting Points (Fitting Nail)

Male (Plug)

BJ

Female (Receptacle)

3 Mounting Points (Fitting Nail)

Male (Plug)

Board To Board Connector **BJ**

Mobile Connector

Female : BF035-I**B-C08-D Male : BM035-I**B-C08-D

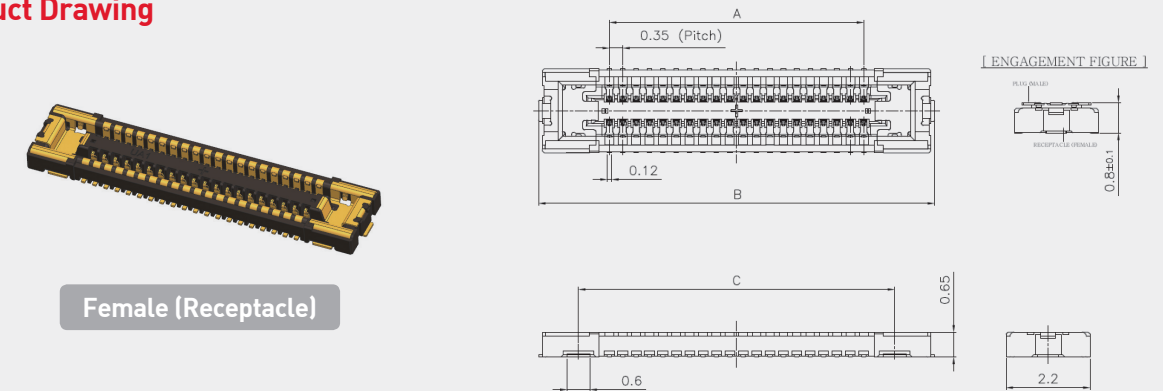
Product Number Structure

B **F** **035** - **I** **xx** **B** - **C** **08** - **D**

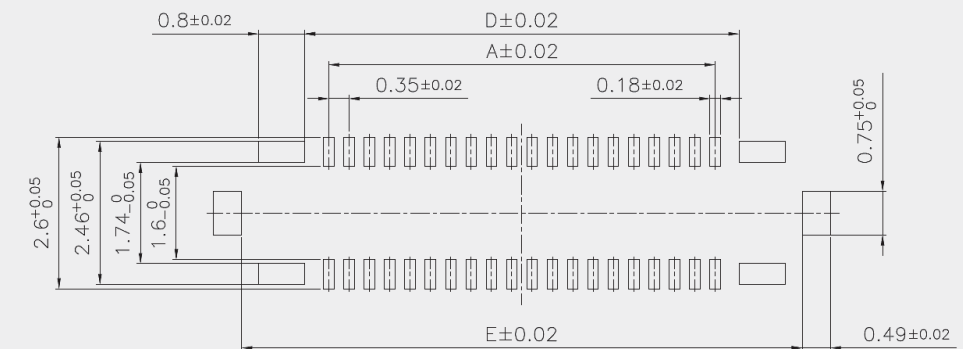
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- | | |
|---------------------------------------|-------------------------------|
| ① Type of connectors : Board to Board | ② Style : Female (Receptacle) |
| ③ Contact Pitch : 0.35mm | ④ Type : Insert |
| ⑤ No. of position : 20P or 40P | ⑥ Test of on board : Board on |
| ⑦ Shape symbol : With Fitting Nail | ⑧ Connector Height : 0.8mm |
| | ⑨ Option |

Product Drawing



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
BF035-I20B-C08-D	20	3.15	6.86	4.77	3.97	6.15
BF035-I40B-C08-D	40	6.65	10.36	8.27	7.47	9.65

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

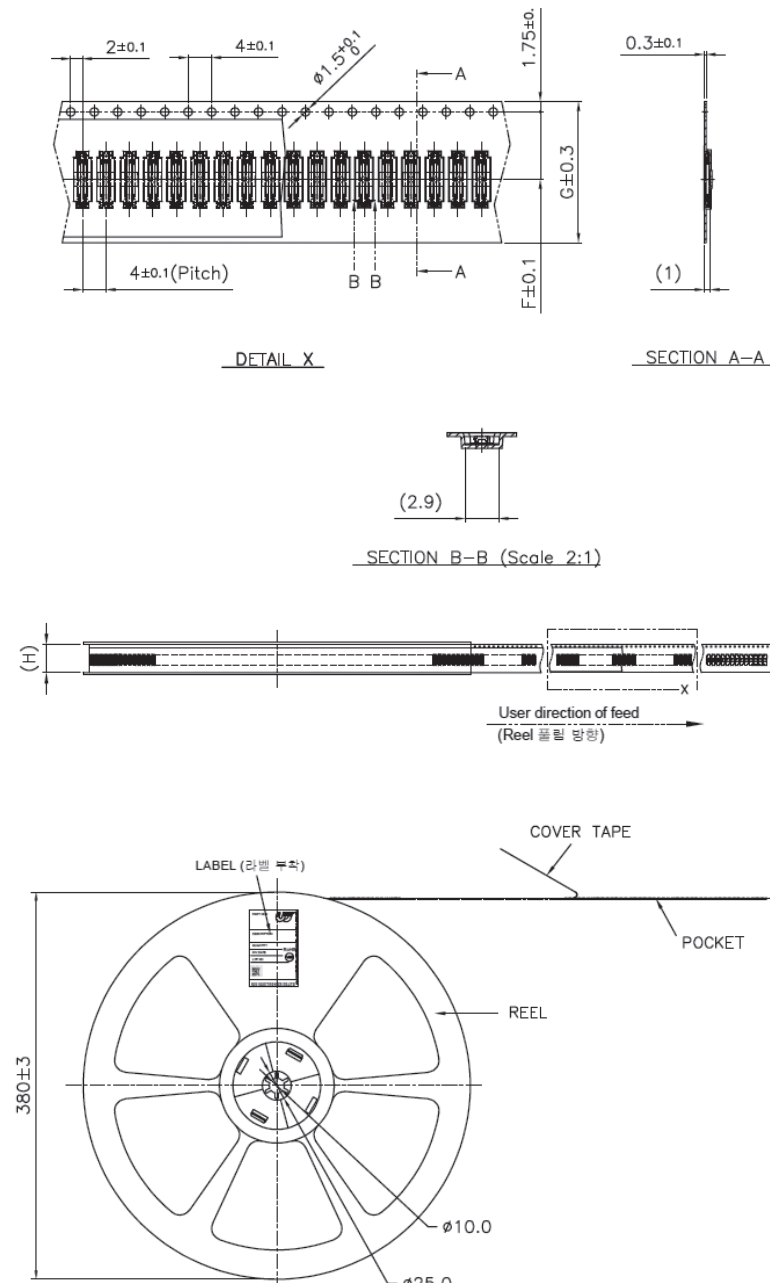
Note 2 : This connector has no polarity.

Board To Board Connector **BJ**

Mobile Connector

Female : BF035-I**B-C08-D Male : BM035-I**B-C08-D

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	F	G	H
BF035-I20B-C08-D	20	7.5	16.0	17.4
BF035-I40B-C08-D	40	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BP**

Mobile Connector

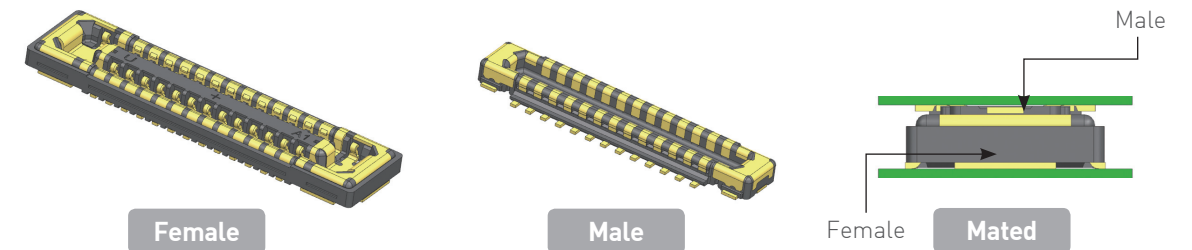
Female : BF035-I26B-C06-E Male : BM035-I26B-C06-E

Applications

- ▶ Smart Phone
- ▶ Smart Watch
- ▶ Tablet PC

Characteristics

- ▶ Full-Insert Structure
- ▶ Compact design and Smaller size



- ▶ For contact stability, Double Contact and Bellows Type Contact Structure
- ▶ 0.35mm pitch, 0.6mm slim stacking design for saving space
- ▶ Functional Fitting Nail
 - 1) Robust type (Mold Prevention of damage)
 - 2) High Current
- ▶ Female , Male - Terminal / Fitting Nail Full-Insert Structure
 - 1) Prevention of Base damage and Reinforcement of strength
 - 2) Improving product quality reliability.

Specifications

Current Rating	Contact Resistance	Dielectric Strength	Temperature Range
Signal 0.3A/Pin Power 5.0A/Pin	Signal 50mΩ [Max.] Power 30mΩ [Max.]	250V AC[RMS]	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
26	0.35	1.90	0.60	7.40	Female : BF035-I26B-C06-E Male : BM035-I26B-C06-E

Board To Board Connector **BP**

Mobile Connector

Female : BF035-I26B-C06-E **Male** : BM035-I26B-C06-E

Product Specification

Ratings	Rated current	Signal : 0.3A/Pin Power : 5.0A/Pin	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35 °C
	Rated voltage	30V AC(RMS) / DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

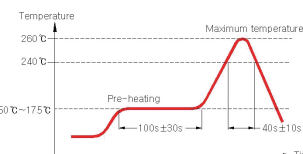
1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	- Signal : 50mΩ [Max.] - Power : 30mΩ [Max.]	- Open circuit voltage: 20mV [AC] - Test current: 1mA.
2. Insulation resistance	50MΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	1) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	- Vibration frequency range : 10-55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	- Acceleration : 50G (490m/s ²) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.] 2) Insulation resistance : 25MΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr

9. Solder heat resistance No loose contacts no deformation.

Reflow condition.
(Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Phosphor Bronze	Au, Ni plated	-
Female Fitting Nail	Copper Alloy	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Copper Alloy	Au, Ni plated	-

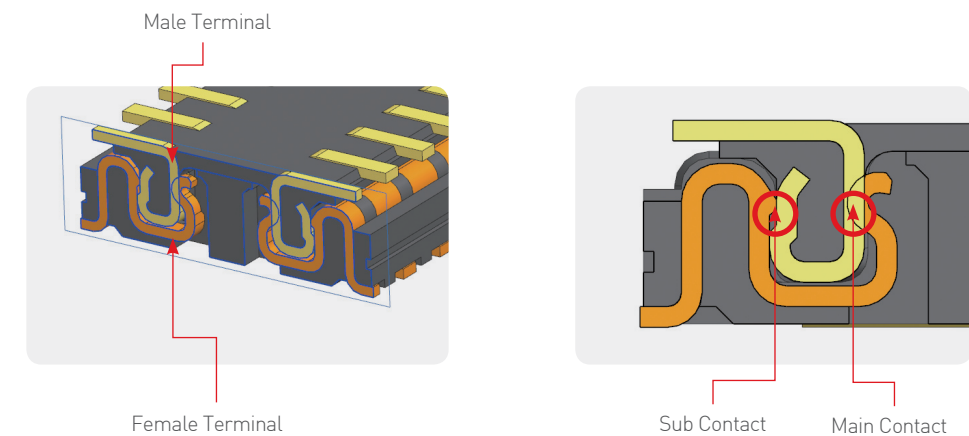
Board To Board Connector **BP**

Mobile Connector

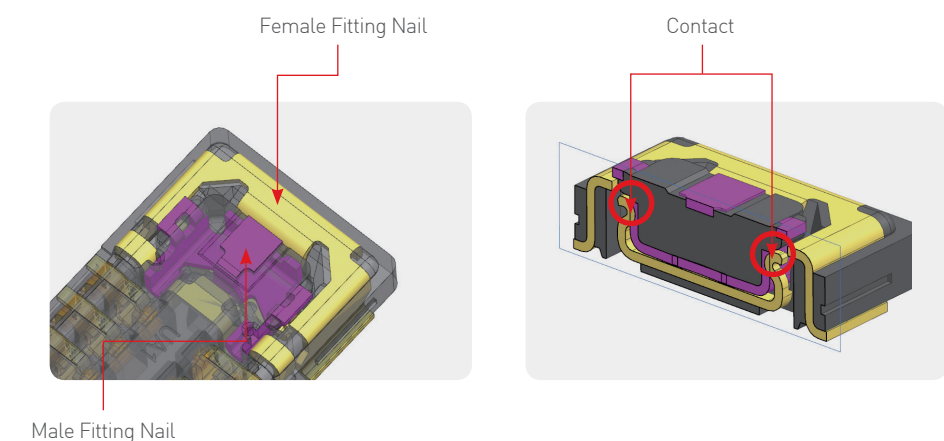
Female : BF035-I26B-C06-E **Male** : BM035-I26B-C06-E

FEATURES AND ADVANTAGES

► Double Contact point for stable contact preservation



► High Current (5A) Fitting Nail



Board To Board Connector **BP**

Mobile Connector

Female : BF035-I26B-C06-E Male : BM035-I26B-C06-E

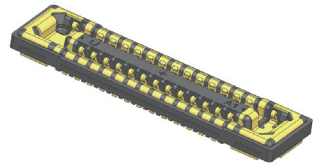
Product Number Structure

B **F** **035** - **I** **26** **B** - **C** **06** - **E**

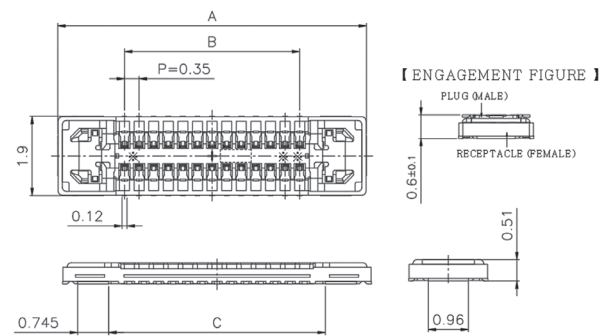
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Female (Receptacle)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 26P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.6mm
- ⑨ Option

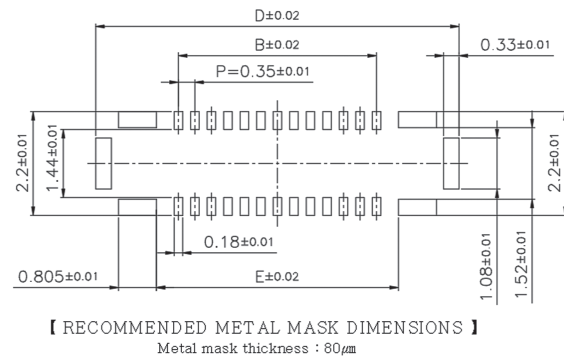
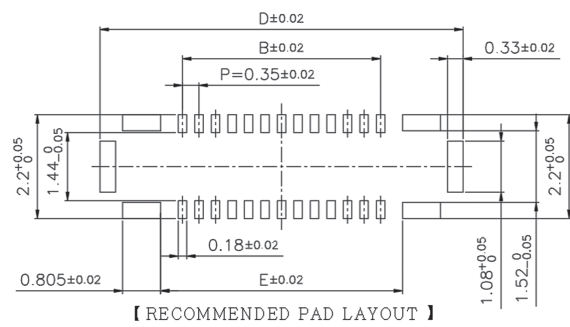
Product Drawing



Female (Receptacle)



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
BF035-I26B-C06-E	26	7.40	4.20	5.19	7.70	5.13

Note 1 : Please place orders in full reel quantities. (1Reel = 20,000ea)

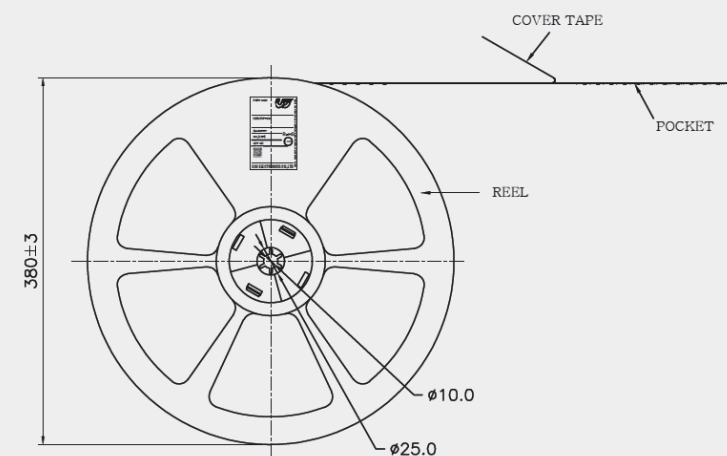
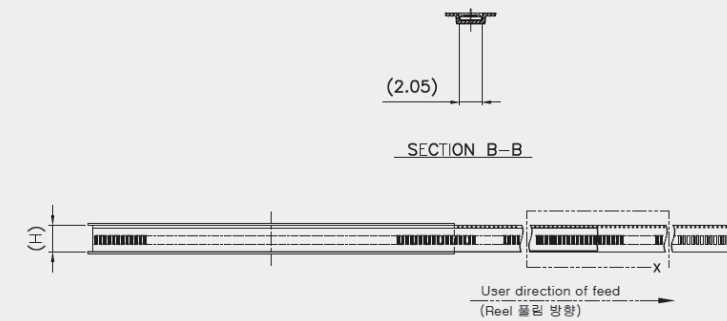
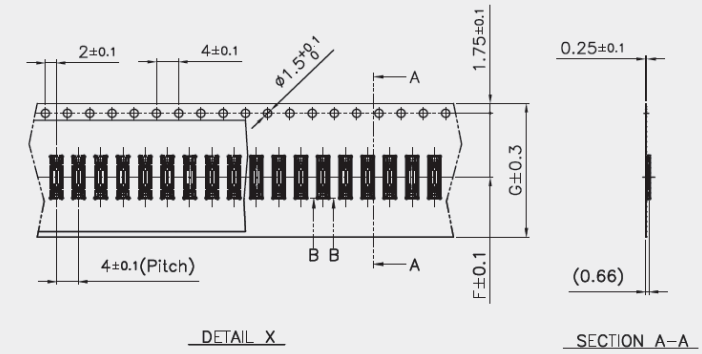
Note 2 : This connector has no polarity.

Board To Board Connector **BP**

Mobile Connector

Female : BF035-I26B-C06-E Male : BM035-I26B-C06-E

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	F	G	H
BF035-I26B-C06-E	26	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 20,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BP**

Mobile Connector

Female : BF035-I26B-C06-E Male : BM035-I26B-C06-E

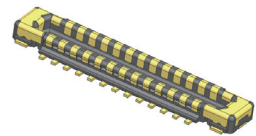
Product Number Structure

BM 035 - I 26 B - C 06 - E

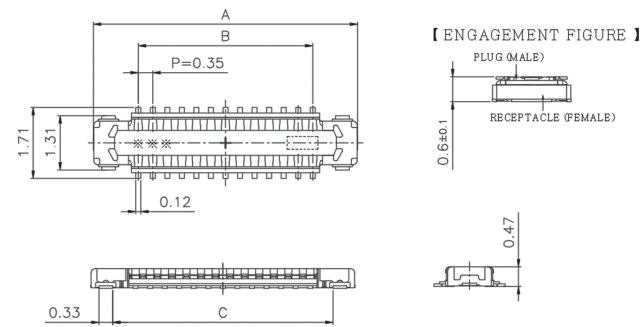
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Male (Plug)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 78P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm
- ⑨ Option

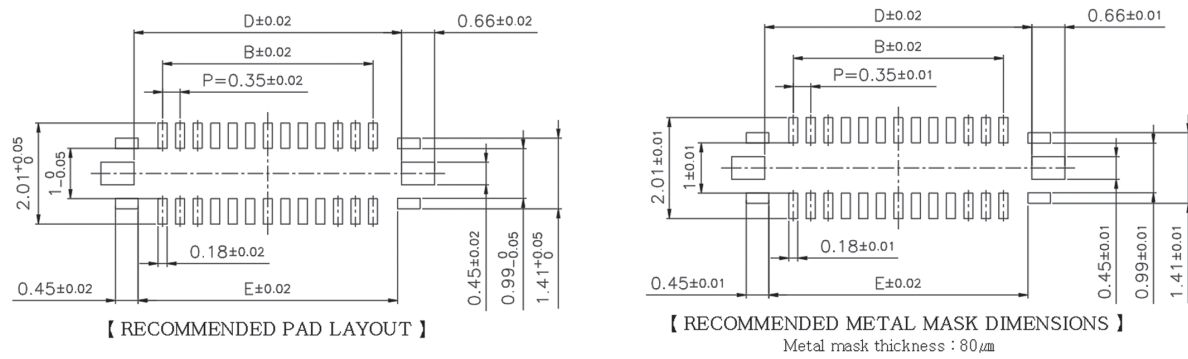
Product Drawing



Male (Plug)



Recommended PCB, Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
BM035-I26B-C06-E	26	6.36	4.20	5.30	5.34	5.18

Note 1 : Please place orders in full reel quantities. (1Reel = 20,000ea)

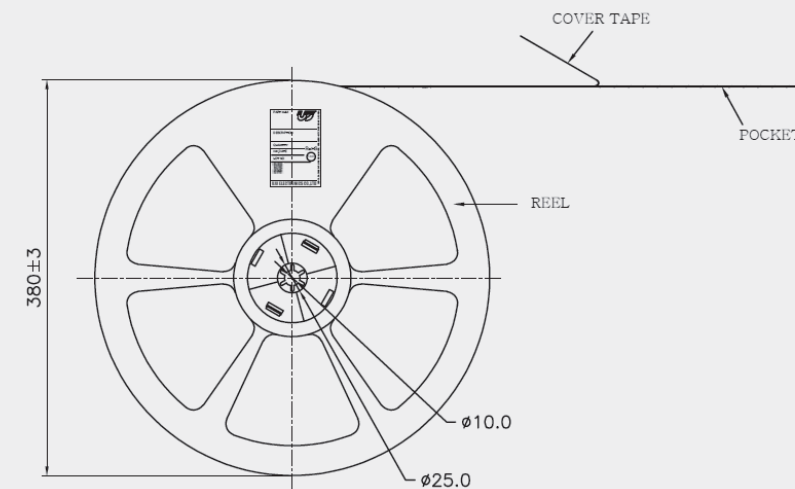
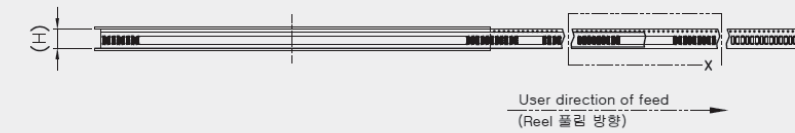
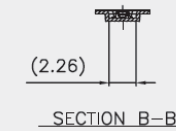
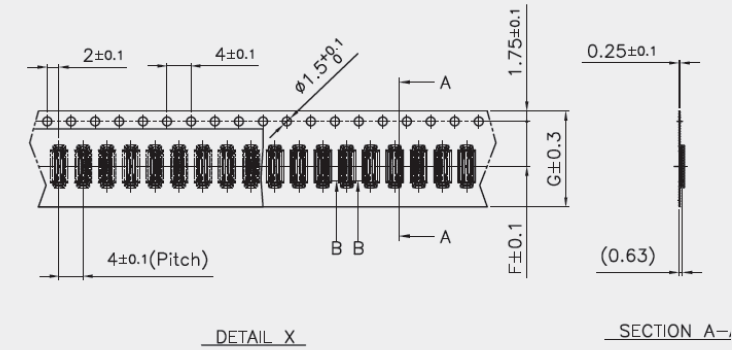
Note 2 : This connector has no polarity.

Board To Board Connector **BP**

Mobile Connector

Female : BF035-I26B-C06-E Male : BM035-I26B-C06-E

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	F	G	H
BM035-I26B-C06-E	26	7.5	16.0	17.5

Note 1 : Please place orders in full reel quantities. (1Reel = 20,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BC**

Mobile Connector

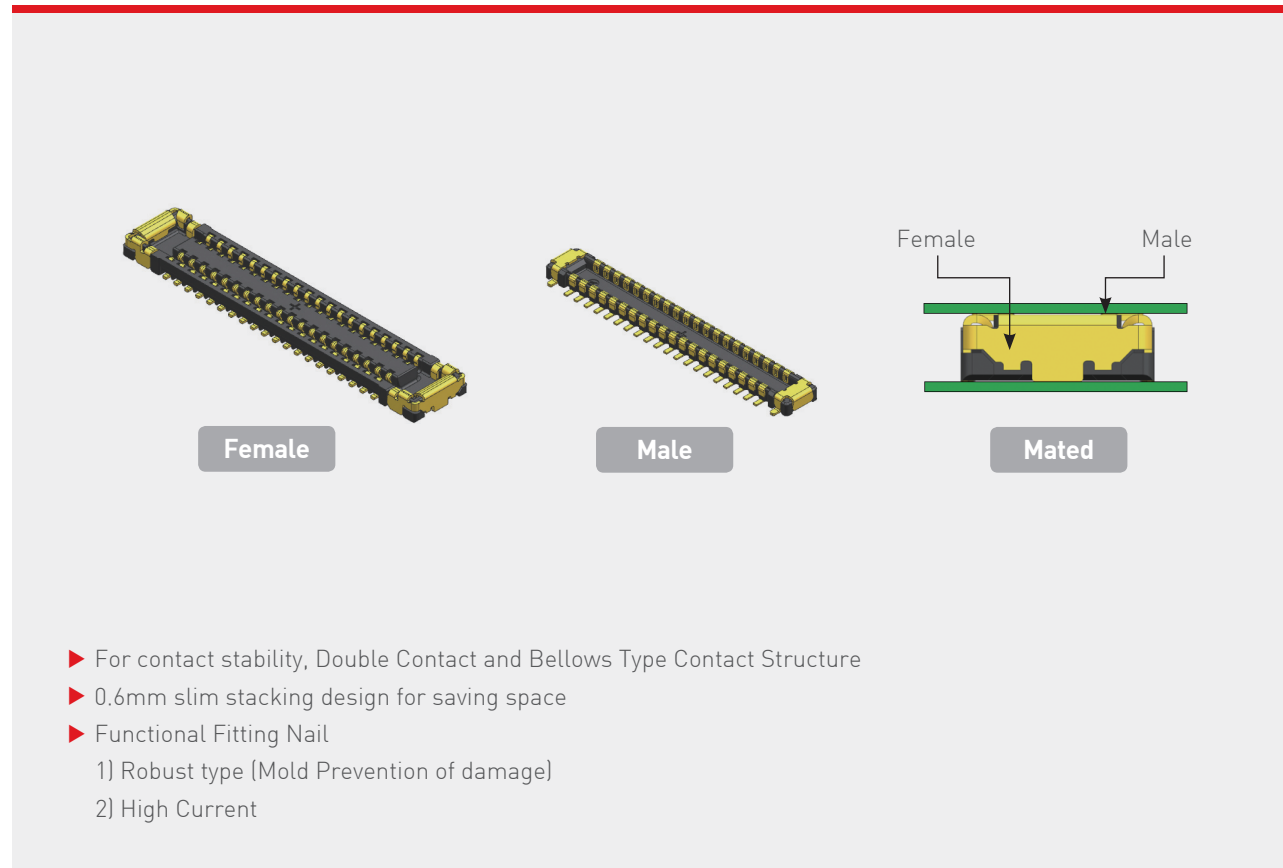
Female : BF035-I**B-C06-C **Male** : BM035-I**B-C06-C

Applications

- ▶ Smart Phone
- ▶ Smart Watch
- ▶ Tablet PC

Characteristics

- ▶ Compact design and Smaller size



Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
Signal 0.3A/Pin Power 4.0A/Pin	Signal 50mΩ [Max.] Power 30mΩ [Max.]	250V AC(RMS)	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
16	0.35	1.70	0.6	5.14	Female : BF035-I**B-C06-C
34				8.35	Male : BM035-I**B-C06-C

Board To Board Connector **BC**

Mobile Connector

Female : BF035-I**B-C06-C **Male** : BM035-I**B-C06-C

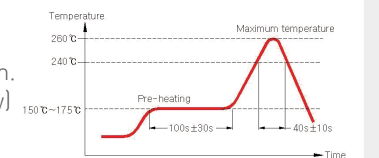
Product Specification

Ratings	Rated current	Signal : 0.3A/Pin Power : 4.0A/Pin	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35°C
	Rated voltage	30V AC(RMS)/DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	- Signal : 50mΩ [Max.] - Power : 30mΩ [Max.]	- Open circuit voltage: 20mV (AC) - Test current: 1mA.
2. Insulation resistance	50MΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	Discontinuity : 1.0 microsec. [Max.]	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock resistance	Discontinuity : 1.0 microsec. [Max.]	- Acceleration : 50G (490m/s ²) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.] 2) Insulation resistance : 25MΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Phosphor Bronze	Au, Ni plated	-
Female Fitting Nail	Copper Alloy	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Copper Alloy	Au, Ni plated	-

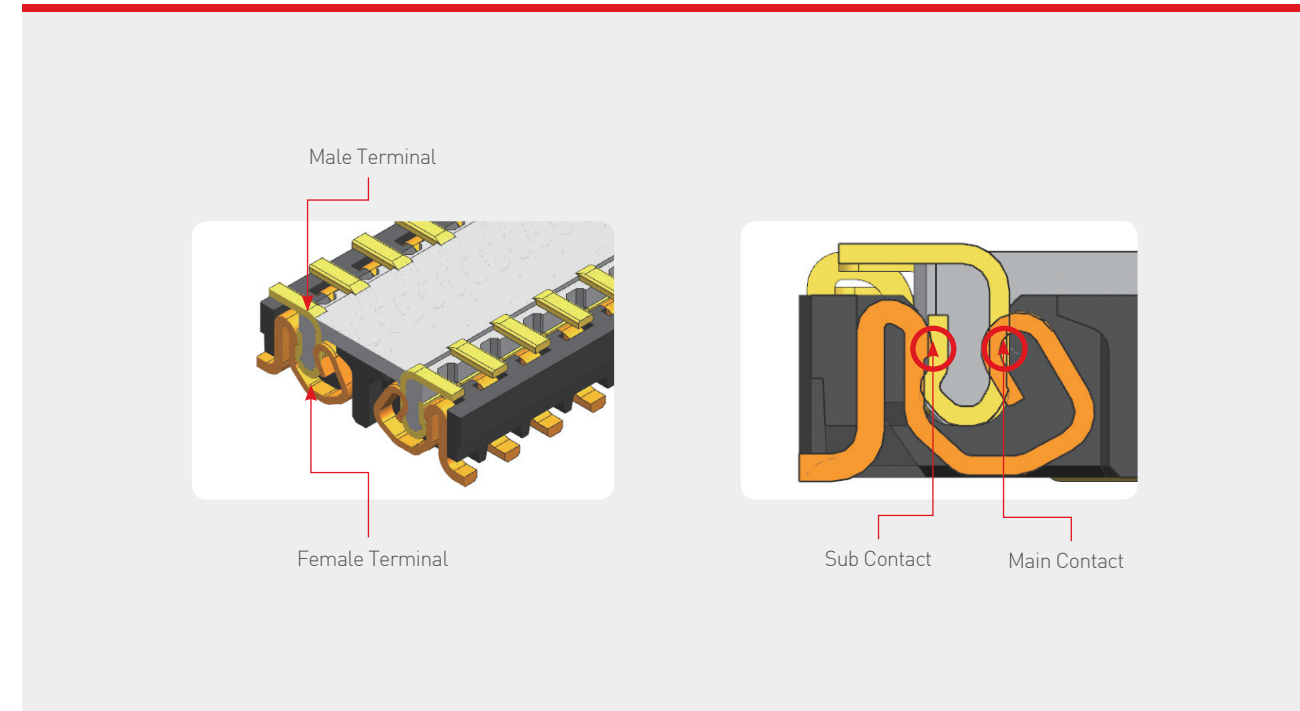
Board To Board Connector **BC**

Mobile Connector

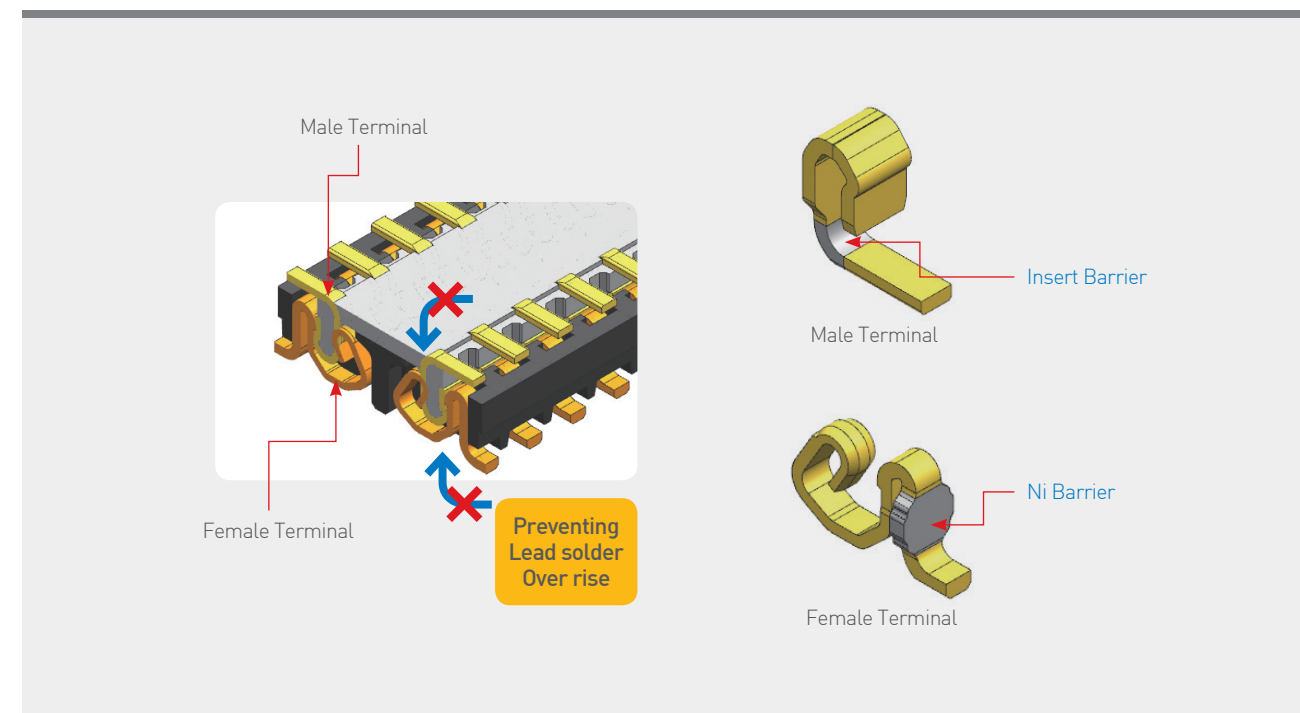
Female : BF035-I**B-C06-C Male : BM035-I**B-C06-C

FEATURES AND ADVANTAGES

▶ Double Contact point for stable contact preservation



▶ Insert or Ni Barrier for preventing Lead solder over rise



Board To Board Connector **BC**

Mobile Connector

Female : BF035-I**B-C06-C Male : BM035-I**B-C06-C

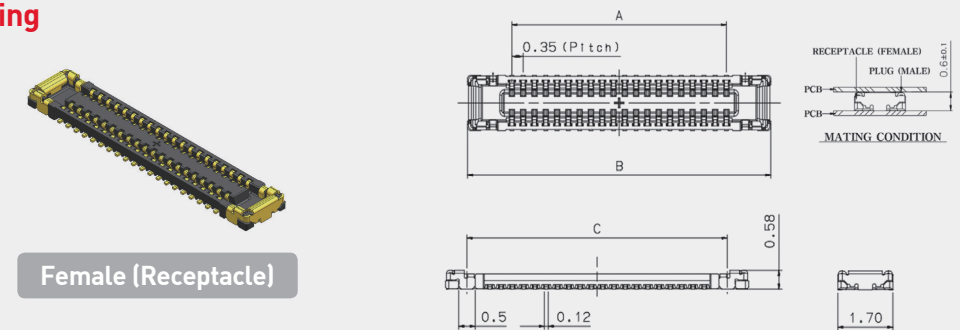
Product Number Structure

B **F** **035** - **I** **xx** **B** - **C** **06** - **C**

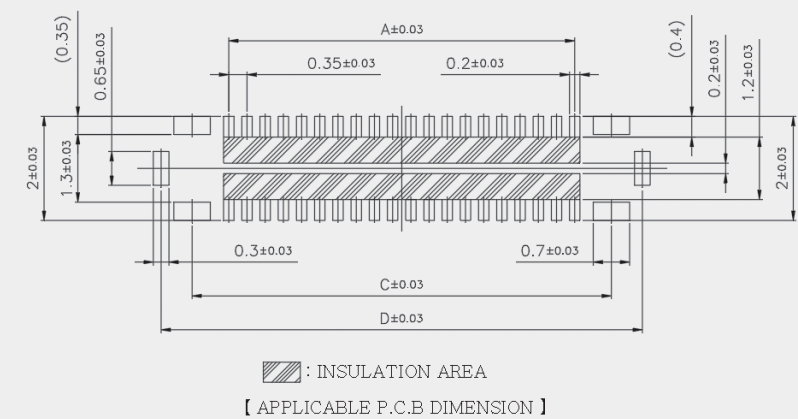
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Female (Receptacle)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 16P or 34P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.6mm
- ⑨ Option

Product Drawing



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D
BF035-I16B-C06-C	16	2.45	5.20	3.86	5.05
BF035-I34B-C06-C	34	5.60	8.35	7.01	8.20

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

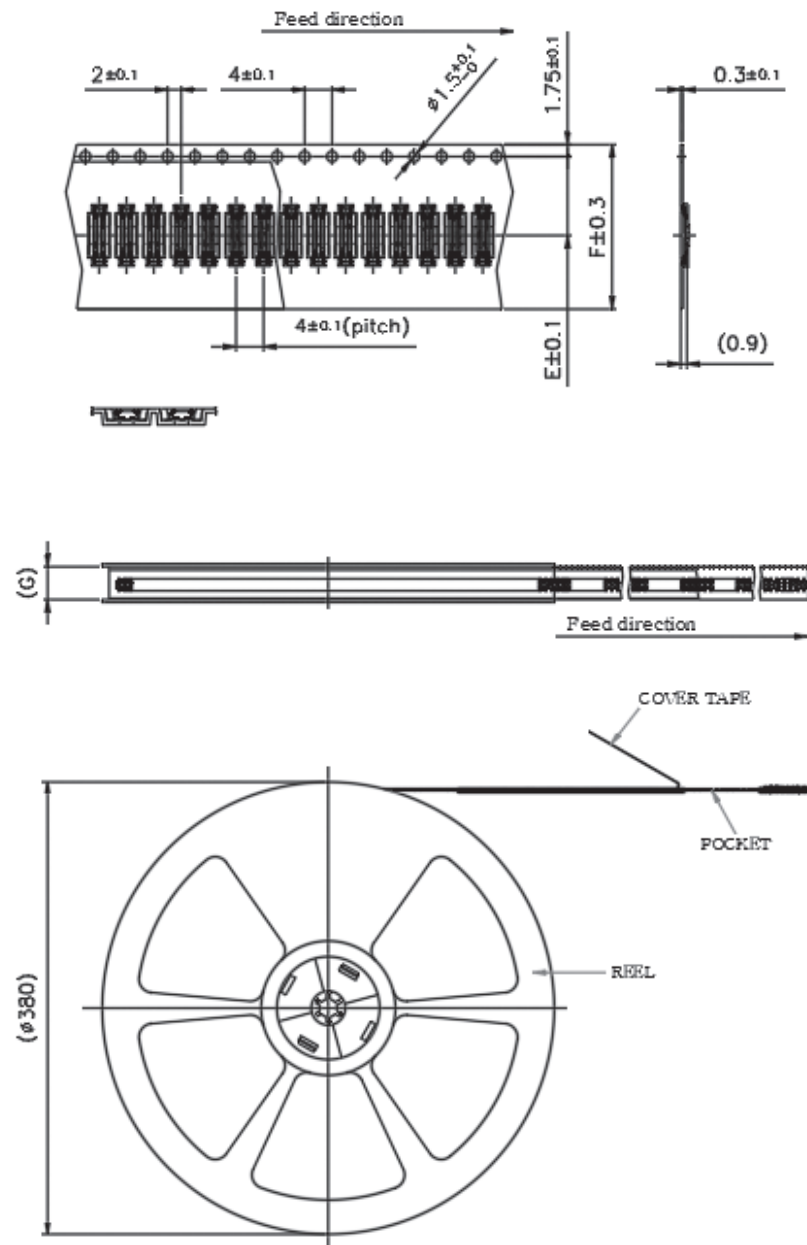
Note 2 : This connector has no polarity.

Board To Board Connector **BC**

Mobile Connector

Female : BF035-I**B-C06-C Male : BM035-I**B-C06-C

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	E	G	G
BF035-I16B-C06-C	16	7.5	16.0	17.4
BF035-I34B-C06-C	34	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BC**

Mobile Connector

Female : BF035-I**B-C06-C Male : BM035-I**B-C06-C

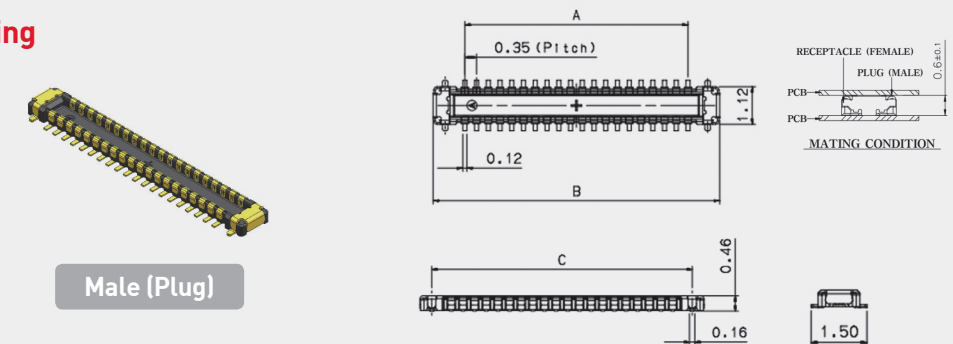
Product Number Structure

BM 035 - I xx B - C 06 - C

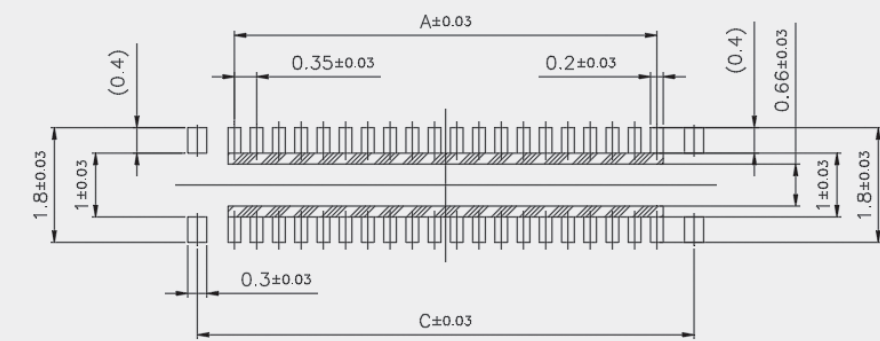
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Male (Plug)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 16P or 34P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.6mm
- ⑨ Option

Product Drawing



Recommended PCB , Metal Mask Layout



【 APPLICABLE P.C.B DIMENSION 】

Unit : mm

Product Code	No. of Contacts	A	B	C
BM035-I16B-C06-C	16	2.45	4.34	3.62
BM035-I34B-C06-C	34	5.60	7.49	6.77

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

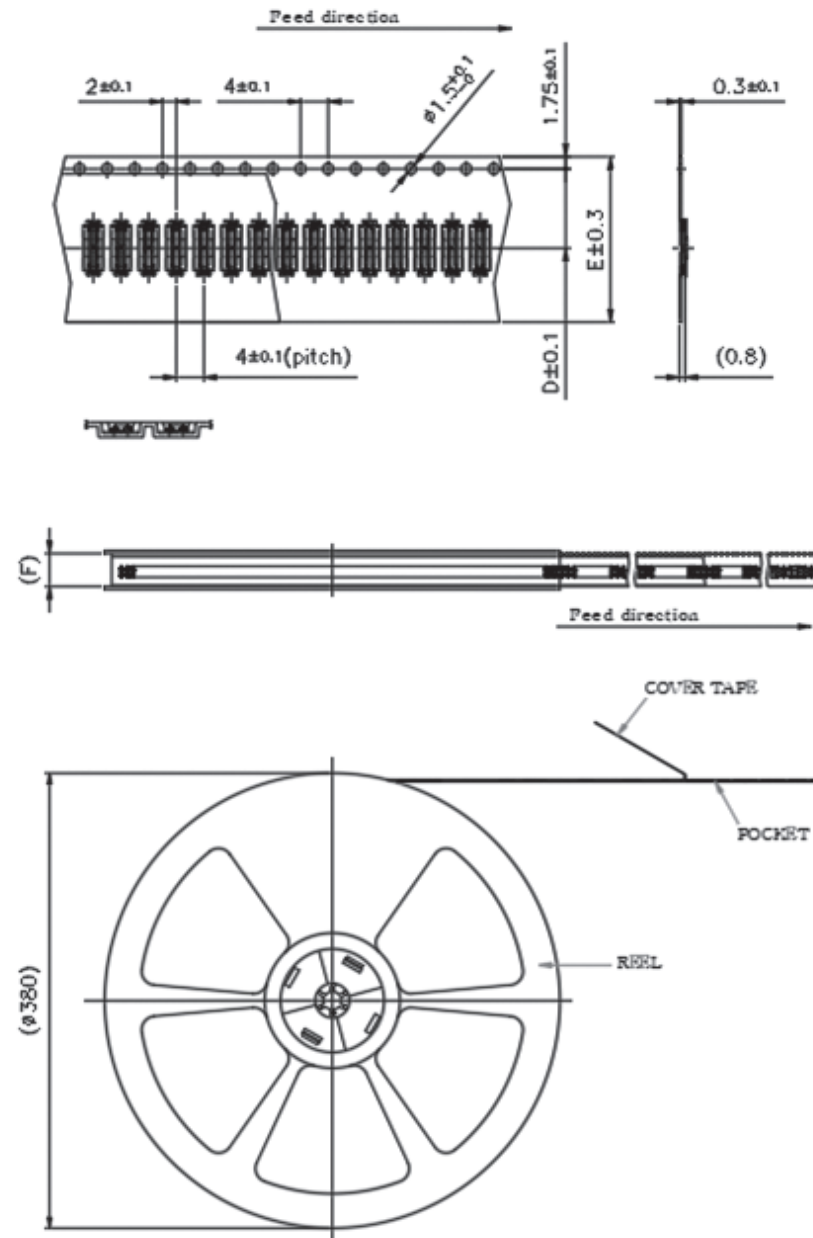
Note 2 : This connector has no polarity.

Board To Board Connector **BC**

Mobile Connector

Female : BF035-I**B-C06-C **Male** : BM035-I**B-C06-C

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	E	G	G
BM035-I16B-C06-C	16	7.5	16.0	17.4
BM035-I34B-C06-C	34	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BR5**

Mobile Connector

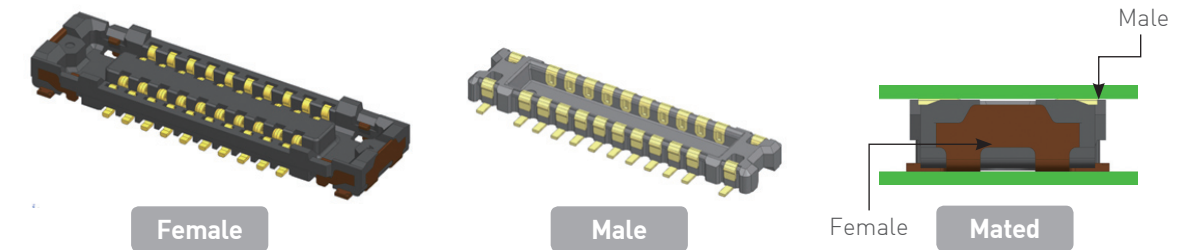
Female : BF035-I**B-C08-B **Male** : BM035-I**B-C08-B

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Compact design and Smaller size



- ▶ For contact stability, Double Contact and Bellows Type Contact Structure.
- ▶ 0.35mm pitch, 0.6mm slim stacking design for saving space.
- ▶ Male Terminal / Female Fitting Nail Insert Structure.

Specifications

Current Rating	Contact Resistance	Dielectric Strength	Temperature Range
0.3A	90mΩ [Max.]	150V AC(RMS)	-35°C - 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Lenght	Product No.
6				3.55	Female : BF035-I**B-C08-B Male : BM035-I**B-C08-B
10	0.35	1.70	0.60	4.25	
20				6.00	

Board To Board Connector **BR5**

Mobile Connector

Female : BF035-I**B-C08-B **Male** : BM035-I**B-C08-B

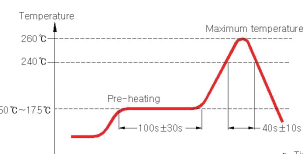
Product Specification

Ratings	Rated current	0.30A	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35 °C
	Rated voltage	30V AC(RMS) / DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	90mΩ [Max.]	- Open circuit voltage: 20mV [AC] - Test current: 1mA.
2. Insulation resistance	50mΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	1) Contact resistance : 90mΩ [Max.]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	1) Contact resistance : 90mΩ [Max.]	- Vibration frequency range : 10-55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Salt spray	1) Contact resistance : 90mΩ [Max.] 2) Insulation resistance : 25MΩ [Min.] 3) No flashover or dielectric breakdown	- Temperature : 35°C±2°C - Duration : 48hr - Salt-solution concentration : 5 ±1%
8. Humidity	1) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.] 2) Insulation resistance : 25MΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr

9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)
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Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Phosphor Bronze	Au, Ni plated	-
Female Fitting Nail	Phosphor Bronze	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Phosphor Bronze	Au, Ni plated	-

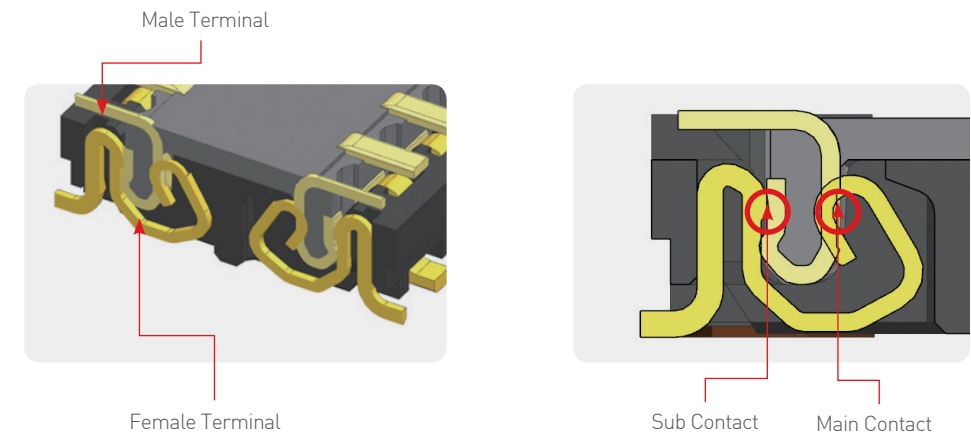
Board To Board Connector **BR5**

Mobile Connector

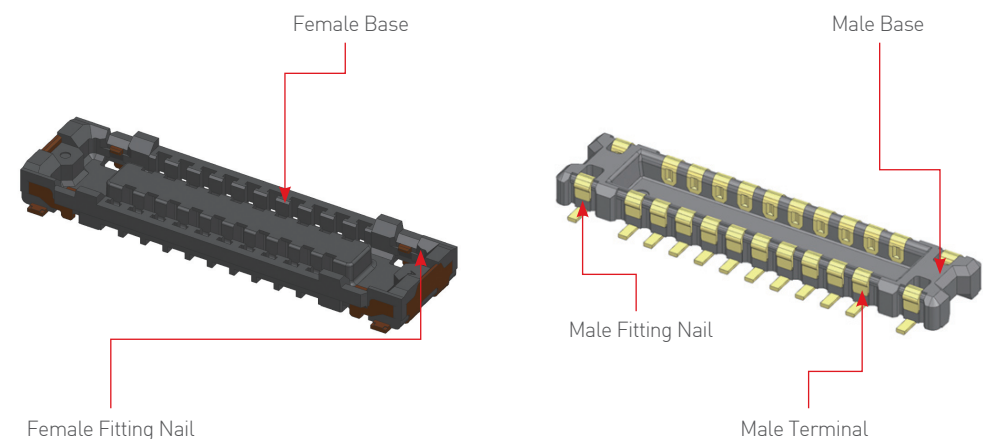
Female : BF035-I**B-C08-B **Male** : BM035-I**B-C08-B

FEATURES AND ADVANTAGES

- Double Contact point for stable contact preservation



- Insert mold Structure



Board To Board Connector **BR5**

Mobile Connector

Female : BF035-I**B-C08-B Male : BM035-I**B-C08-B

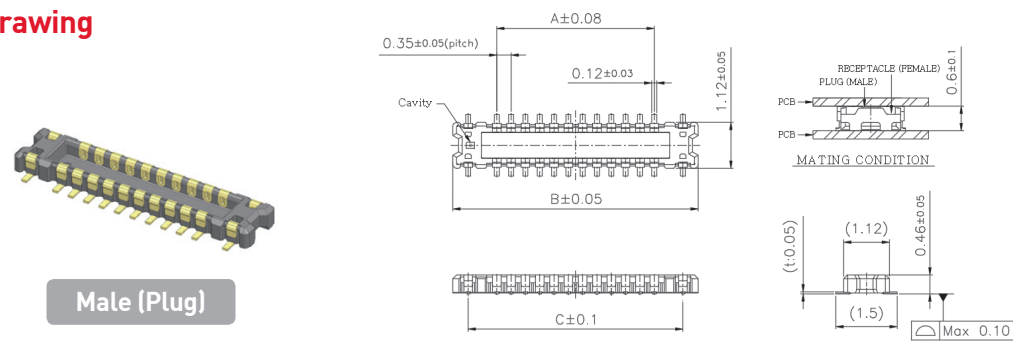
Product Number Structure

BM 035 - I xx B - C 08 - B

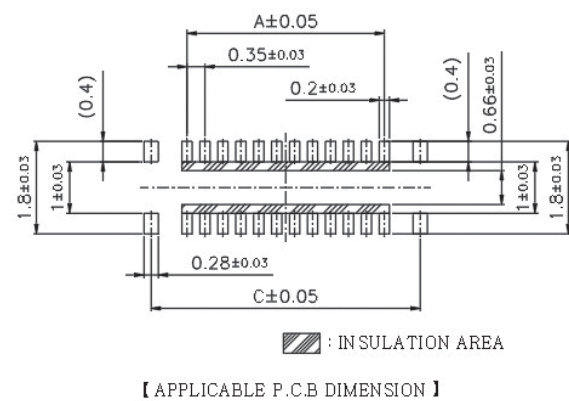
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Type of connectors : Board to Board	② Style : Male (Plug)
③ Contact Pitch : 0.35mm	④ Type : Insert
⑤ No. of position : 34P	⑥ Test of on board : Board on
⑦ Shape symbol : With Fitting Nail	⑧ Connector Height : 0.8mm
	⑨ Option

Product Drawing



Recommended PCB, Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C
BF035-I06B-C08-B	6	0.70	2.85	2.10
BF035-I10B-C08-B	10	1.40	3.55	2.80
BF035-I20B-C08-B	20	3.15	5.30	4.55

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

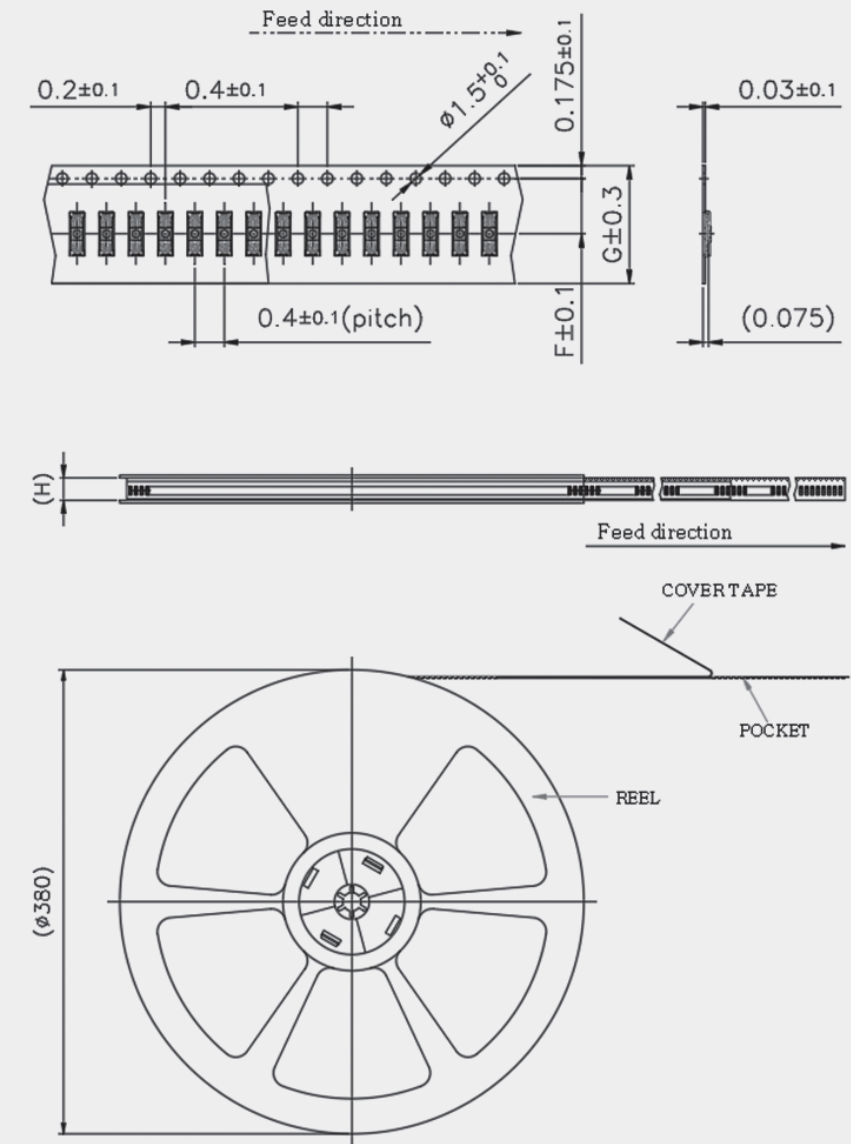
Note 2 : This connector has no polarity.

Board To Board Connector **BR5**

Mobile Connector

Female : BF035-I**B-C08-B Male : BM035-I**B-C08-B

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	F	G	H
BF035-I06B-C08-B	6	7.5	16.0	17.4
BF035-I10B-C08-B	10	7.5	16.0	17.4
BF035-I20B-C08-B	20	7.5	16.0	17.4

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BR2**

Mobile Connector

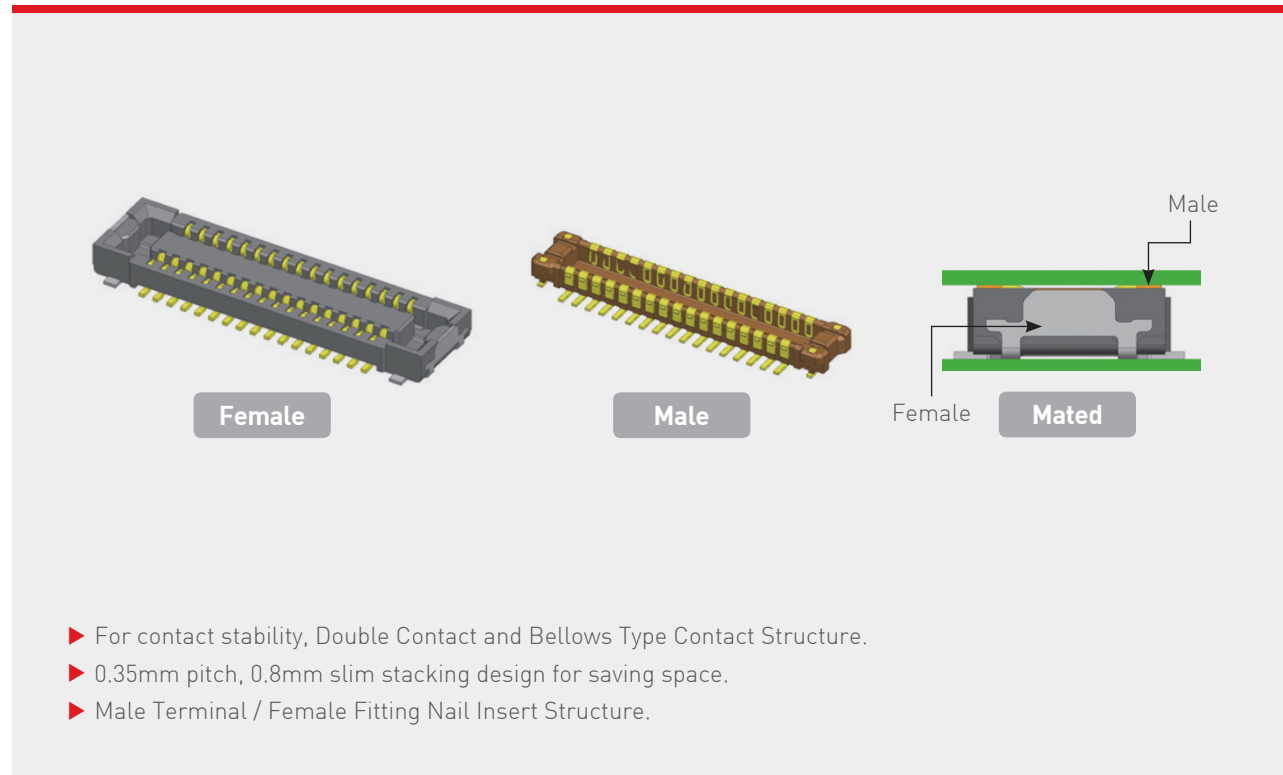
Female : BF035-I34B-C08 **Male** : BM035-I34B-C08

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Compact design and Smaller size



Specifications

Current Rating	Contact Resistance	Dielectric Strength	Temperature Range
0.25A	60mΩ [Max.]	250V AC(RMS)	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Lenght	Product No.
34	0.35	2.50	0.80	8.30	Female : BF035-I34B-C08 Male : BM035-I34B-C08

Board To Board Connector **BR2**

Mobile Connector

Female : BF035-I34B-C08 **Male** : BM035-I34B-C08

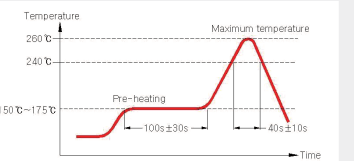
Product Specification

Ratings	Rated current	0.25A	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35°C
	Rated voltage	30V AC(RMS)/DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	60mΩ [Max.]	- Open circuit voltage: 20mV (AC) - Test current: 1mA.
2. Insulation resistance	50MΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	Contact resistance : 90mΩ [Max.]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	Contact resistance : 90mΩ [Max.]	- Vibration frequency range : 10-55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock resistance	1) Contact resistance : 90mΩ [Max.] 2) Insulation resistance : 25mΩ [Min.]	- Temperature : 35°C±2°C - Duration : 48hr - Salt-solution concentration : 5 ±1%
8. Humidity	1) Contact resistance : 90mΩ [Max.] 2) Insulation resistance : 25mΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Phosphor Bronze	Au, Ni plated	-
Female Fitting Nail	Copper Alloy	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Phosphor Bronze	Au, Ni plated	-

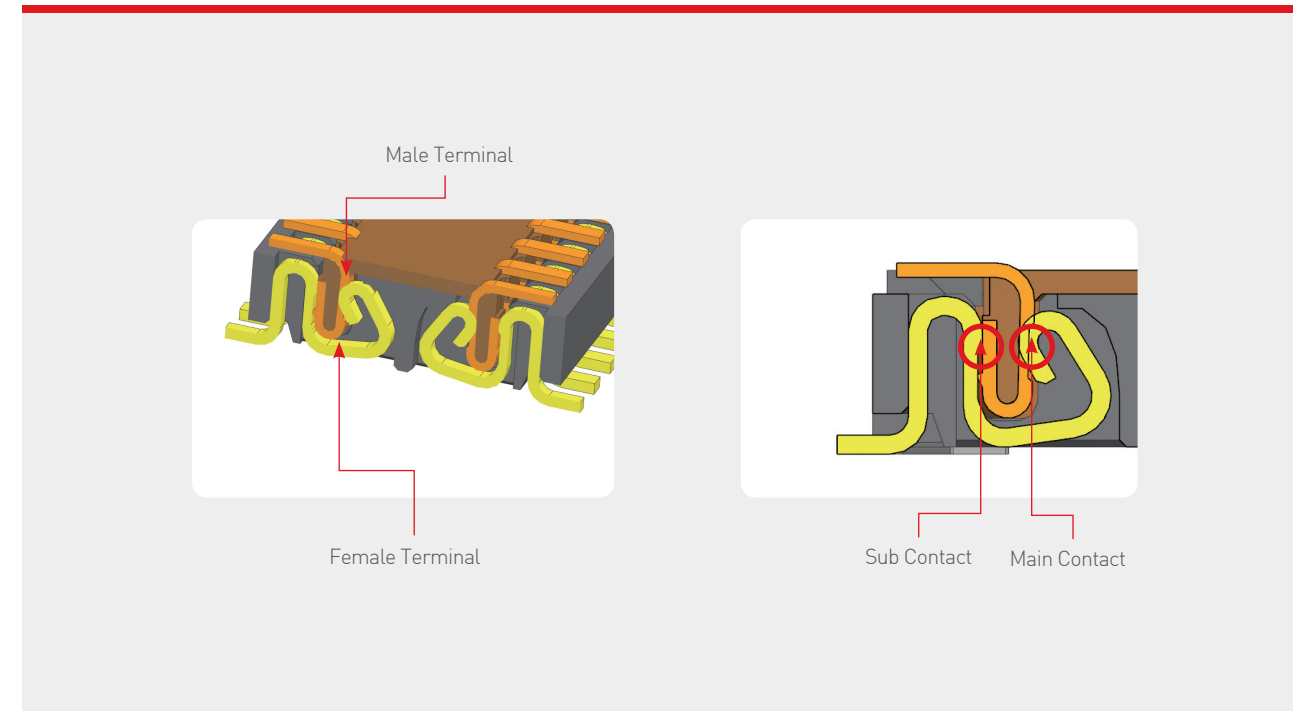
Board To Board Connector **BR2**

Mobile Connector

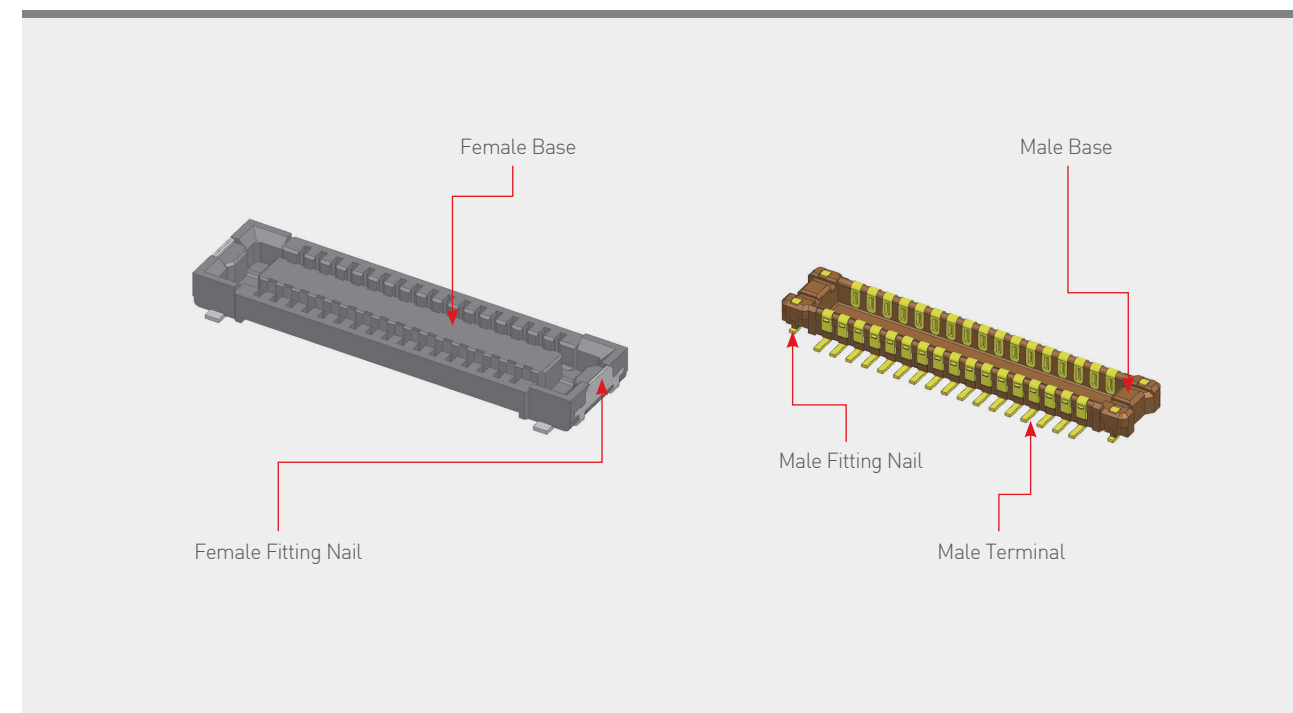
Female : BF035-I34B-C08 Male : BM035-I34B-C08

FEATURES AND ADVANTAGES

► Double Contact point for stable contact preservation



► Insert mold Structure



Board To Board Connector **BR2**

Mobile Connector

Female : BF035-I34B-C08 Male : BM035-I34B-C08

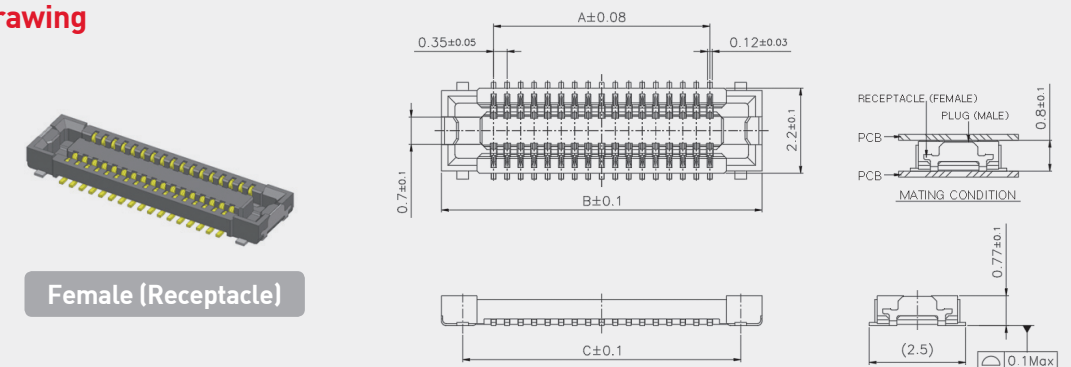
Product Number Structure

B F 035 - I 34 B - C 08

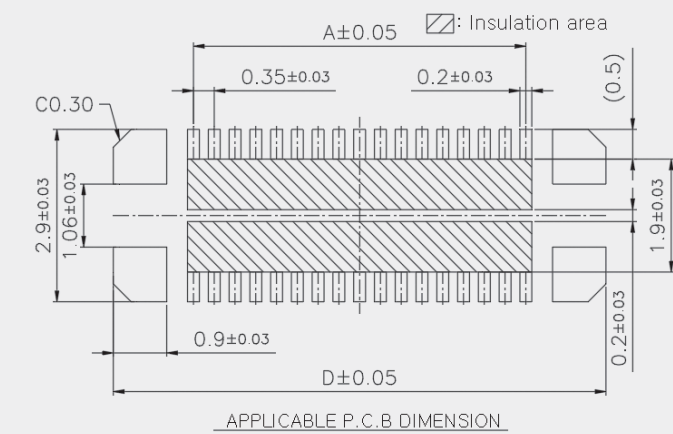
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : Board to Board
- ② Style : Female (Receptacle)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 34P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm

Product Drawing



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D
BF035-I34B-C08	34	5.60	8.30	7.20	8.30

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

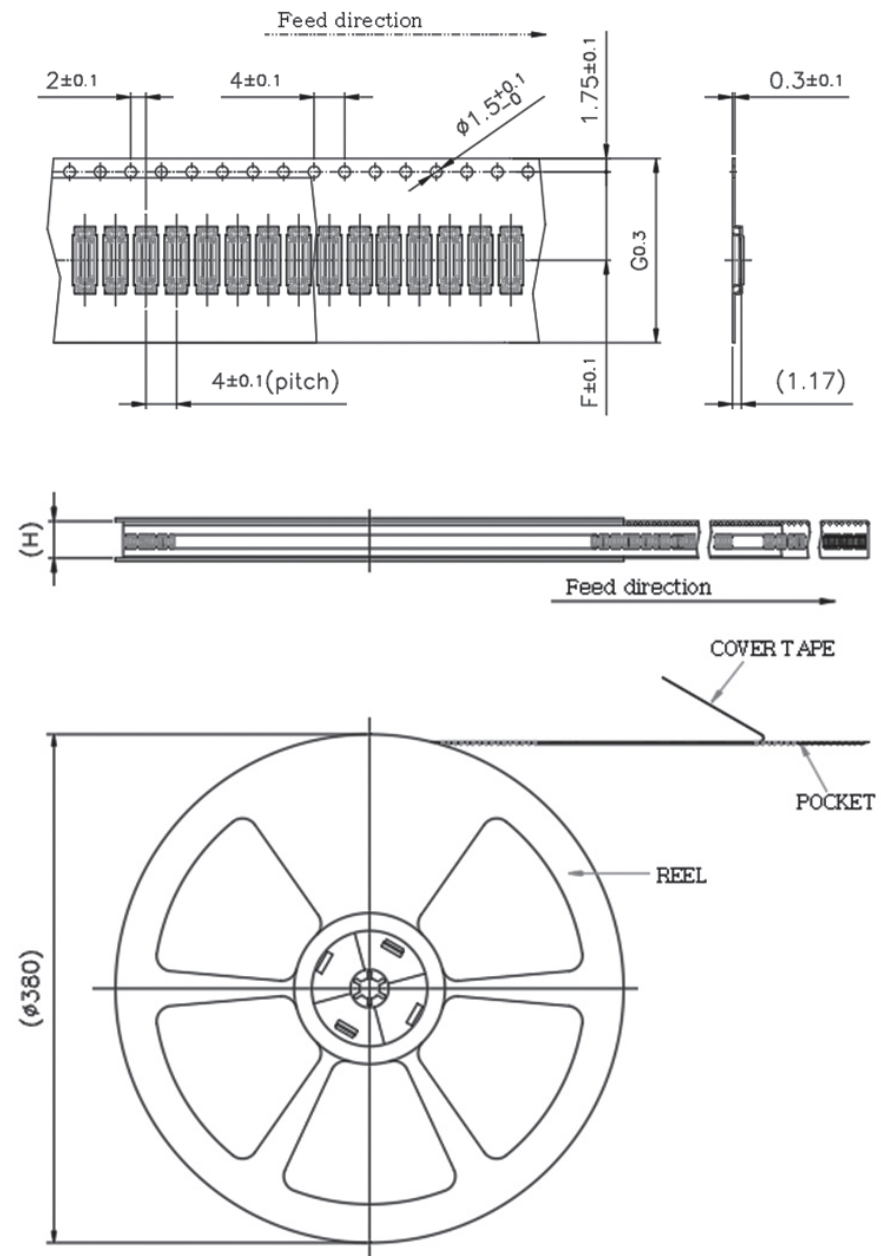
Note 2 : This connector has no polarity.

Board To Board Connector **BR2**

Mobile Connector

Female : BF035-I34B-C08 Male : BM035-I34B-C08

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	F	G	H
BF035-I34B-C08	34	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BR2**

Mobile Connector

Female : BF035-I34B-C08 Male : BM035-I34B-C08

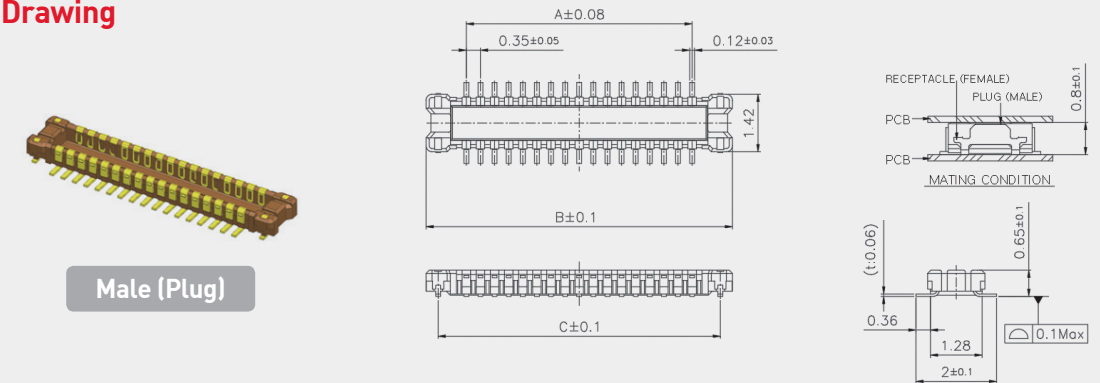
Product Number Structure

B M 035 - I 34 B - C 08

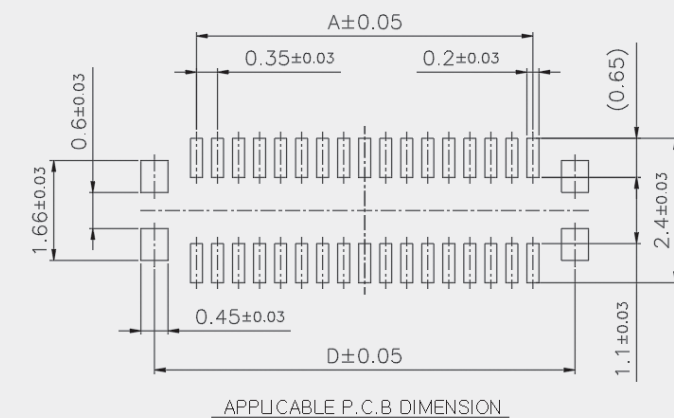
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : Board to Board
- ② Style : Male (Plug)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 34P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm

Product Drawing



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D
BM035-I34B-C08	34	5.60	7.60	7.00	7.00

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

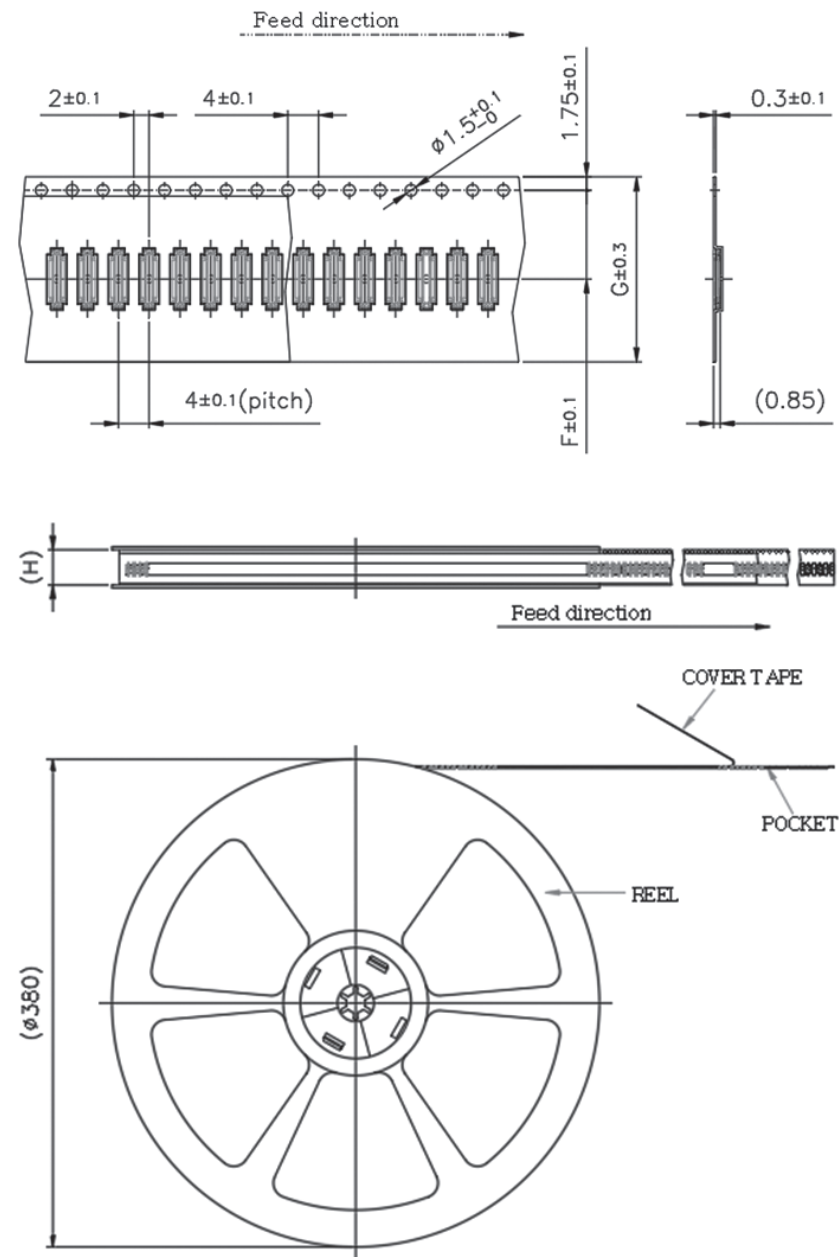
Note 2 : This connector has no polarity.

Board To Board Connector **BR2**

Mobile Connector

Female : BF035-I34B-C08 Male : BM035-I34B-C08

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	F	G	H
BM035-I34B-C08	34	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BR1**

Mobile Connector

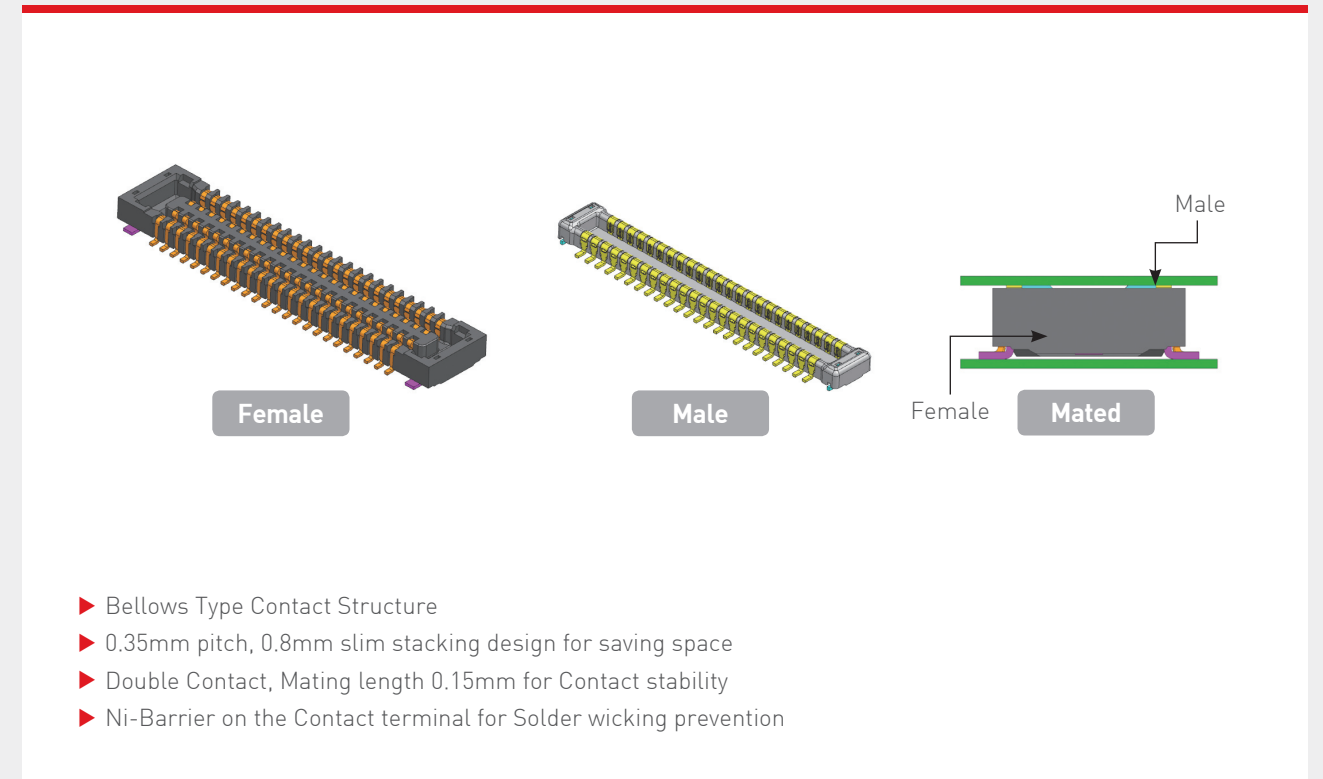
Female : BF035-V**B-C08 Male : BM035-V**B-C08

Applications

- ▶ Smart Phone
- ▶ Smart Watch
- ▶ Tablet PC

Characteristics

- ▶ Compact design and Smaller size
- ▶ Bellows type Double Contact



- ▶ Bellows Type Contact Structure
- ▶ 0.35mm pitch, 0.8mm slim stacking design for saving space
- ▶ Double Contact, Mating length 0.15mm for Contact stability
- ▶ Ni-Barrier on the Contact terminal for Solder wicking prevention

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
0.3A	50mΩ [Max.]	250V AC(RMS)	-35°C - 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
24	0.35	2.40	0.80	6.45	Female : BF035-V**B-C08 Male : BM035-V**B-C08
34				8.20	
48				10.65	
60				12.75	

Board To Board Connector **BR1**

Mobile Connector

Female : BF035-V**B-C08 Male : BM035-V**B-C08

Product Specification

Ratings	Rated current	0.3A	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35 °C
	Rated voltage	30V AC(RMS)/DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	50mΩ [Max.]	- Open circuit voltage: 20mV (AC) - Test current: 1mA.
2. Insulation resistance	50mΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	Contact resistance : 90mΩ [Max.]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance : 90mΩ [Max.]	- Vibration frequency range : 10-55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance : 90mΩ [Max.]	- Acceleration : 50G (490%) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance : 90mΩ [Max.] 2) Insulation resistance : 25mΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr

9. Solder heat resistance No loose contacts no deformation.

Reflow condition. (Refer to Reflow)

Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Copper Alloy	Au, Ni plated	-
Female Fitting Nail	Phosphor Bronze	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Phosphor Bronze	Au, Ni plated	-

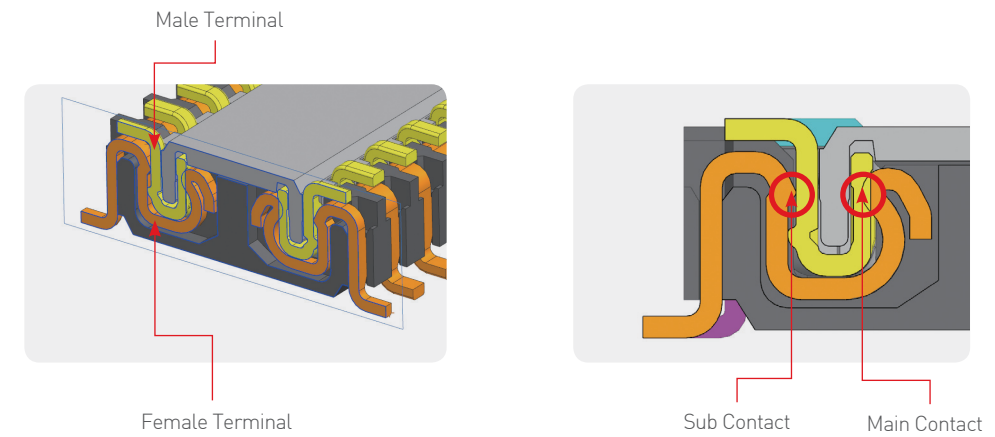
Board To Board Connector **BR1**

Mobile Connector

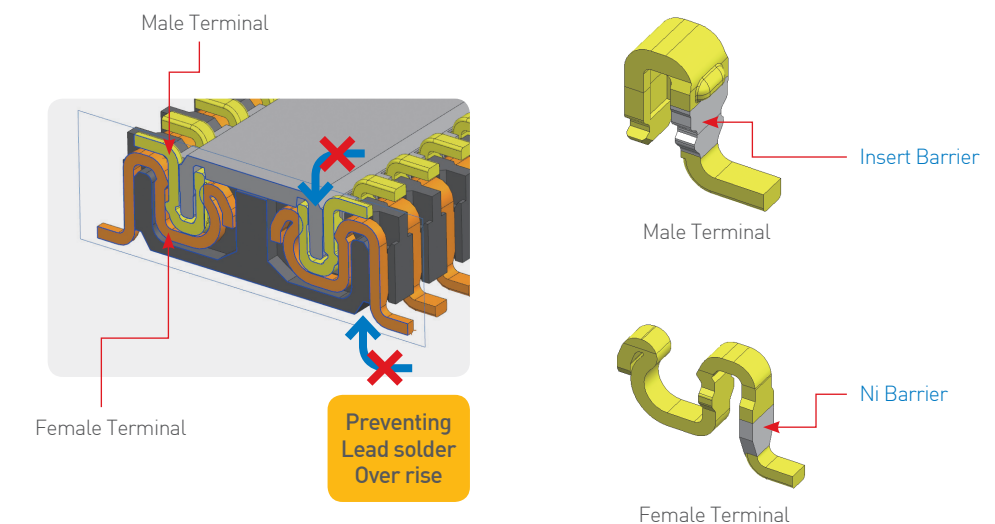
Female : BF035-V**B-C08 Male : BM035-V**B-C08

FEATURES AND ADVANTAGES

- Double Contact point for stable contact preservation



- Ni Barrier for preventing Lead solder over rise



Board To Board Connector **BR1**

Mobile Connector

Female : BF035-V**B-C08 Male : BM035-V**B-C08

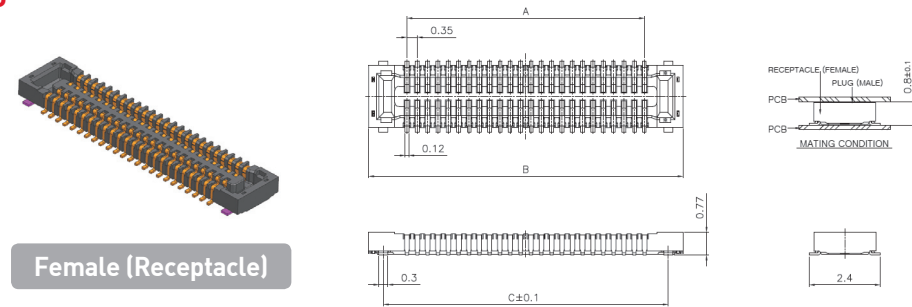
Product Number Structure

B **F** **035** - **I** **34** **B** - **C** **08**

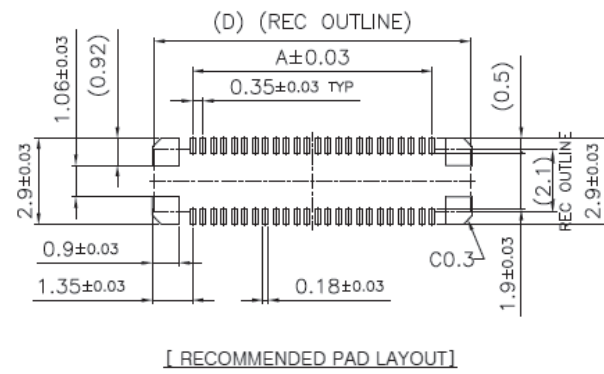
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : Board to Board
- ② Style : Female (Receptacle)
- ③ Contact Pitch : 0.35mm
- ④ Type : Vertical
- ⑤ No. of position : 24, 34, 48, 60
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm

Product Drawing



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D
BF035-V24B-C08	24	3.85	6.45	5.45	6.45
BF035-V34B-C08	34	5.60	8.20	7.20	8.20
BF035-V48B-C08	48	8.05	10.65	9.65	10.65
BF035-V60B-C08	60	10.15	12.75	11.75	12.75

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

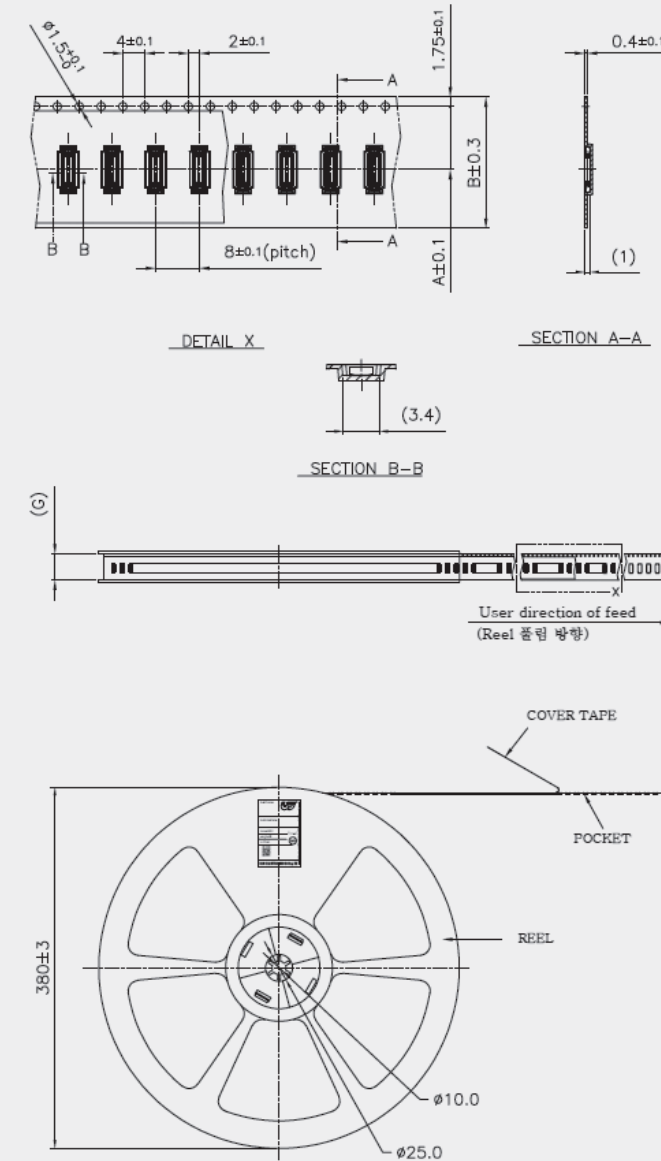
Note 2 : This connector has no polarity.

Board To Board Connector **BR1**

Mobile Connector

Female : BF035-V**B-C08 Male : BM035-V**B-C08

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	E	F	G
BF035-V24B-C08	24	7.5	16.0	17.4
BF035-V34B-C08	34	11.5	24.0	25.4
BF035-V48B-C08	48	11.5	24.0	25.4
BF035-V60B-C08	60	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BR1**

Mobile Connector

Female : BF035-V**B-C08 Male : BM035-V**B-C08

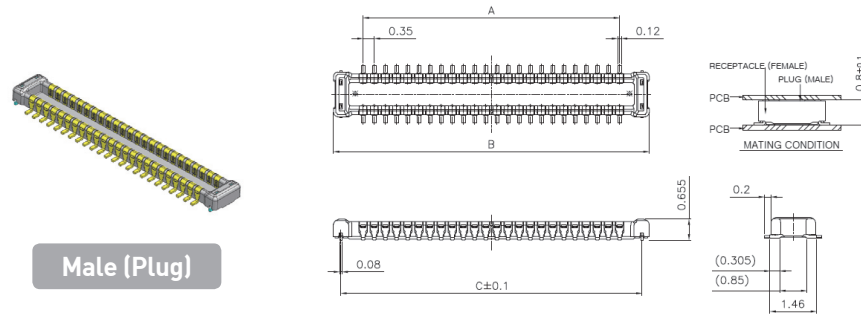
Product Number Structure

BM 035 - V xx B - C 08

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

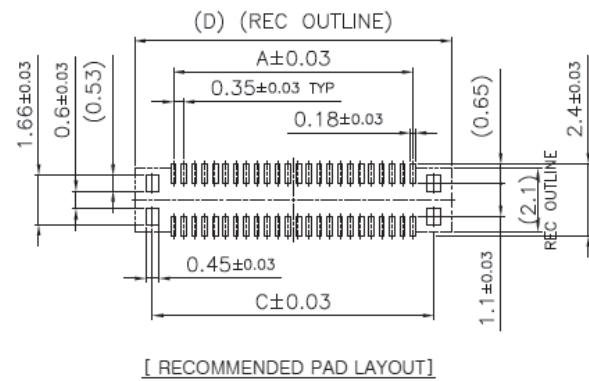
- ① Type of connectors : Board to Board
- ② Style : Male (Plug)
- ③ Contact Pitch : 0.35mm
- ④ Type : Vertical
- ⑤ No. of position : 24, 34, 48, 60
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm

Product Drawing



Male (Plug)

Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D
BM035-V24B-C08	24	3.85	5.71	5.25	6.45
BM035-V34B-C08	34	5.60	7.46	7.00	8.20
BM035-V48B-C08	48	8.05	9.91	9.45	10.65
BM035-V60B-C08	60	10.15	12.01	11.55	12.75

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

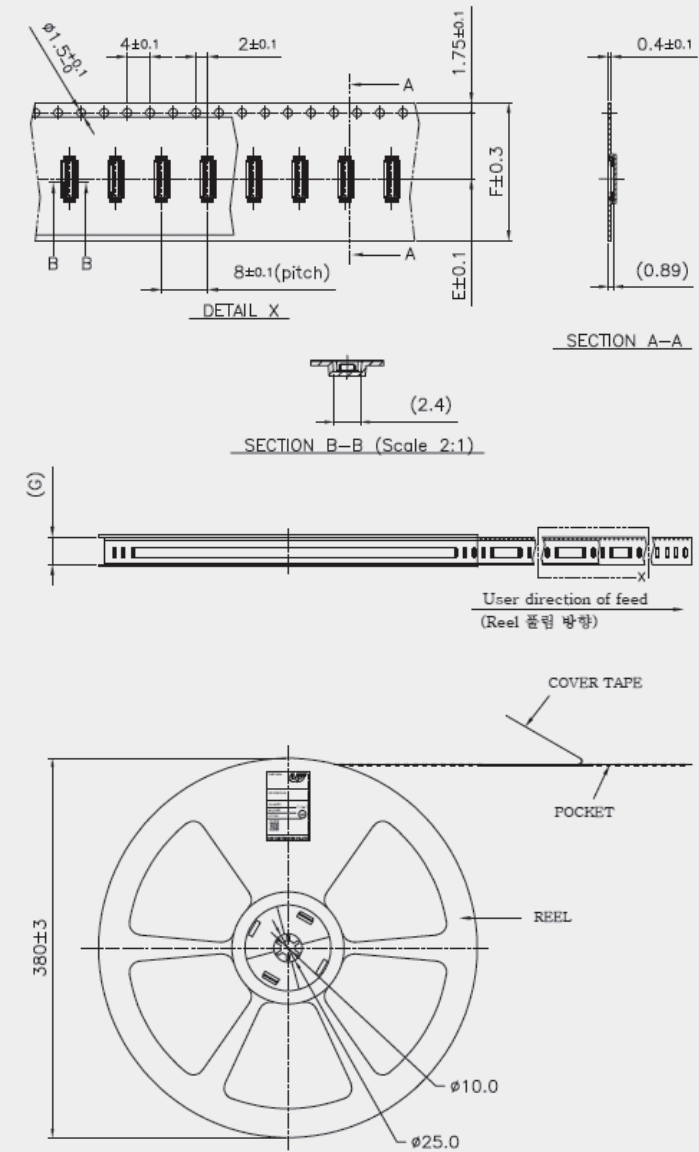
Note 2 : This connector has no polarity.

Board To Board Connector **BR1**

Mobile Connector

Female : BF035-V**B-C08 Male : BM035-V**B-C08

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	E	F	G
BM035-V24B-C08	24	7.5	16.0	17.4
BM035-V34B-C08	34	11.5	24.0	25.4
BM035-V48B-C08	48	11.5	24.0	25.4
BM035-V60B-C08	60	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **SW**

Mobile Connector

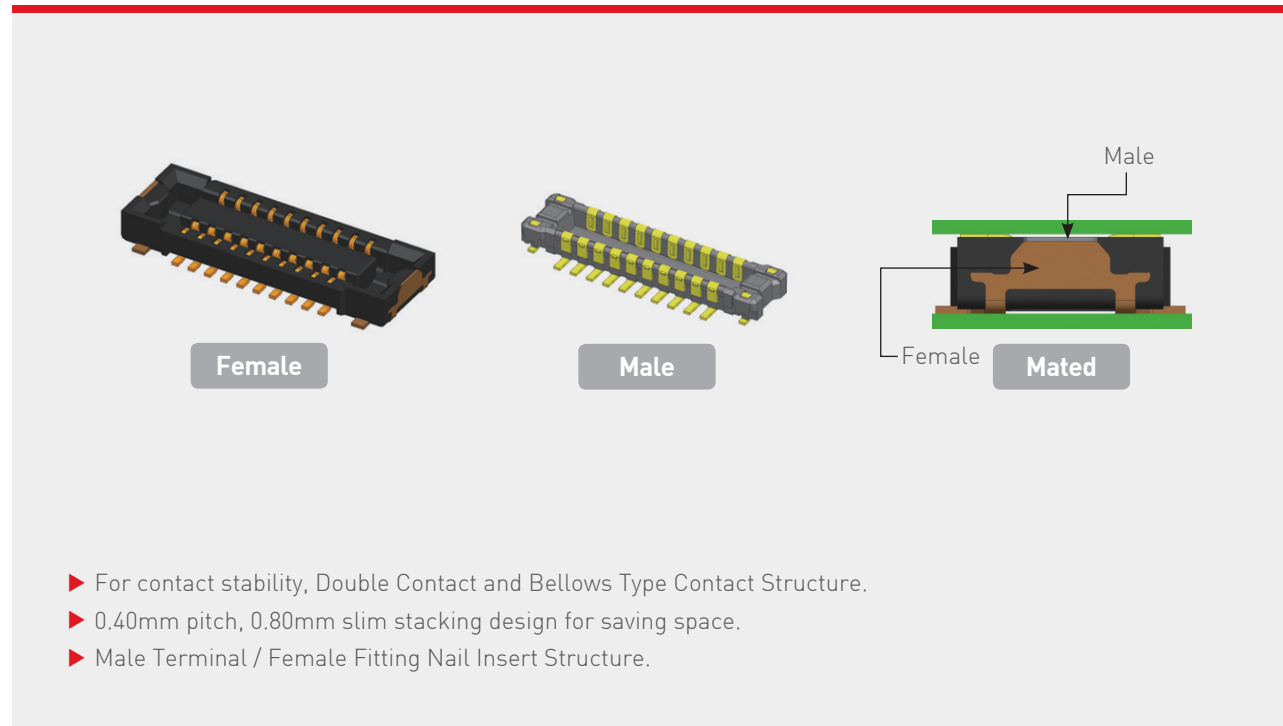
Female : BF040-I**B-C08-A **Male** : BM040-I**B-C08-A

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Compact design and Smaller size



Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
0.3A	60mΩ [Max.]	250V AC(RMS)	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
10	0.40	2.50	0.80	4.50	Female : BF040-I**B-C08-A Male : BM040-I**B-C08-A
12				4.90	
16				5.70	
24				7.30	
30				8.50	
34				9.30	

Board To Board Connector **SW**

Mobile Connector

Female : BF040-I**B-C08-A **Male** : BM040-I**B-C08-A

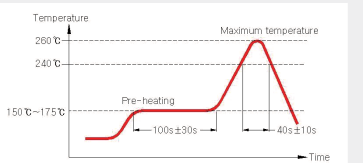
Product Specification

Ratings	Rated current	0.3A	Operating temperature range	-55°C to +85°C 1	Storage temperature range	+15°C to +35 °C
	Rated voltage	30V AC(RMS)/DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	60mΩ [Max.]	- Open circuit voltage: 20mV (AC) - Test current: 1mA.
2. Insulation resistance	50mΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	Contact resistance : 90mΩ [Max.]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	Contact resistance : 90mΩ [Max.]	- Vibration frequency range : 10-55-10Hz - Total amplitude : 1.5mm - Test current : 100mA - Duration : 2h each (6h in total)
7. Salt spray	1) Contact resistance : 90mΩ [Max.] 2) Insulation resistance : 25MΩ [Min.]	- Temperature : 35°C±2°C - Duration : 48hr Salt-solution concentration : 5 ±1%
8. Humidity	1) Contact resistance - 90mΩ [Max.] 2) Insulation resistance : 25MΩ [Min.] 3) Appearance : No damage, loose part no crack.	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Phosphor Bronze	Au, Ni plated	-
Female Fitting Nail	Phosphor Bronze	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Phosphor Bronze	Au, Ni plated	-

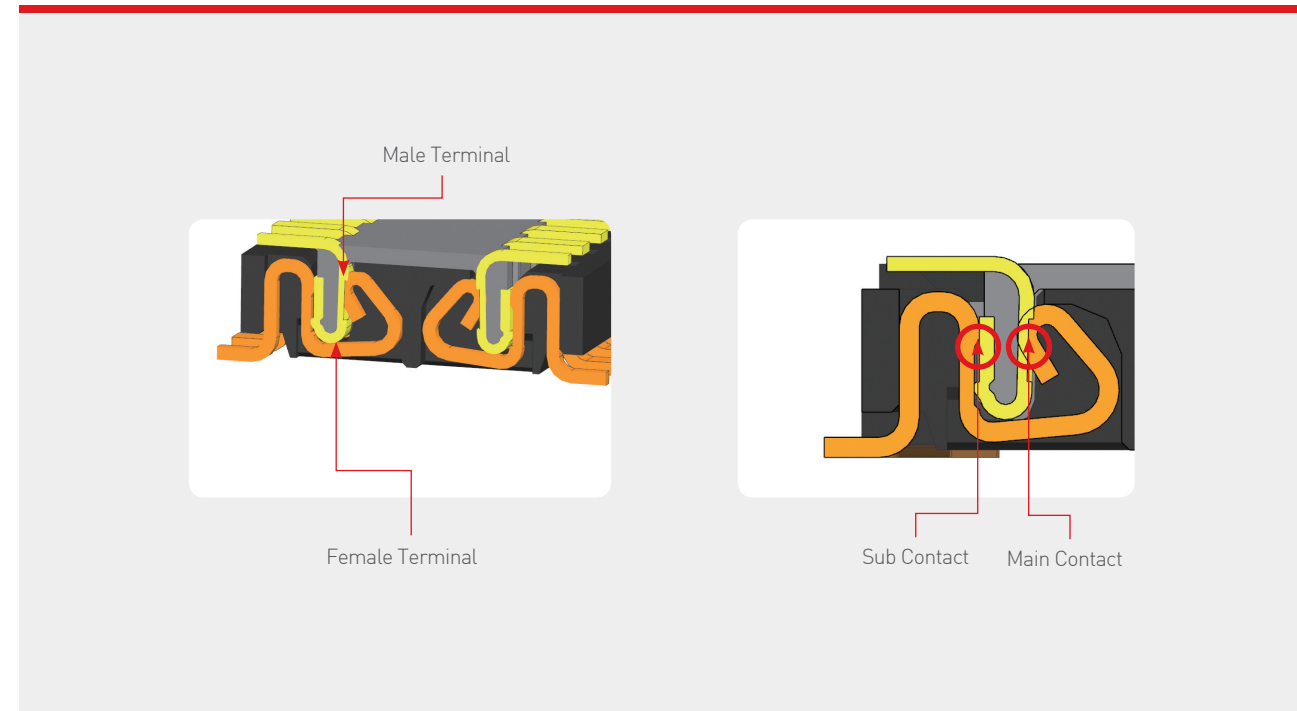
Board To Board Connector **SW**

Mobile Connector

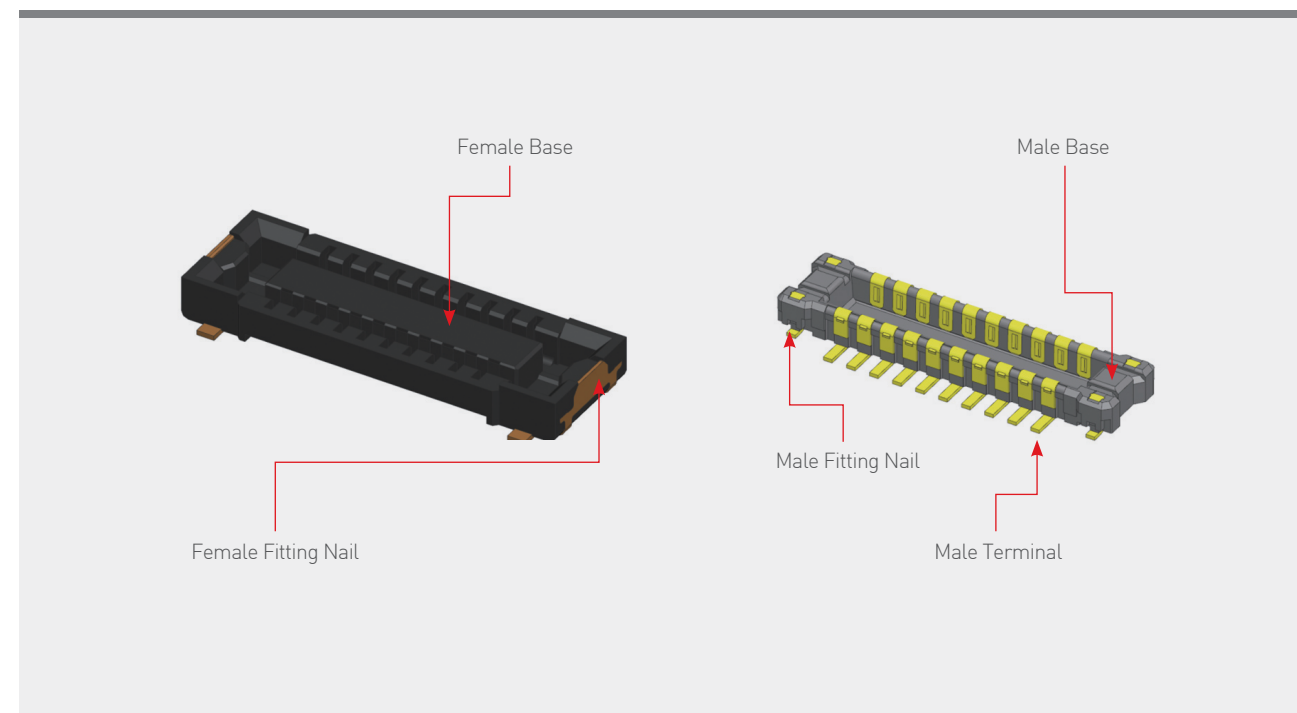
Female : BF040-I**B-C08-A Male : BM040-I**B-C08-A

FEATURES AND ADVANTAGES

► Double Contact point for stable contact preservation



► Insert mold Structure



Board To Board Connector **SW**

Mobile Connector

Female : BF040-I**B-C08-A Male : BM040-I**B-C08-A

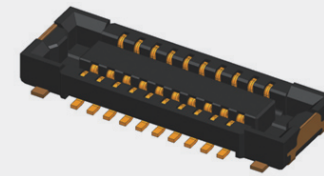
Product Number Structure

B **F** **040** - **I** ****** **B** - **C** **08** - **A**

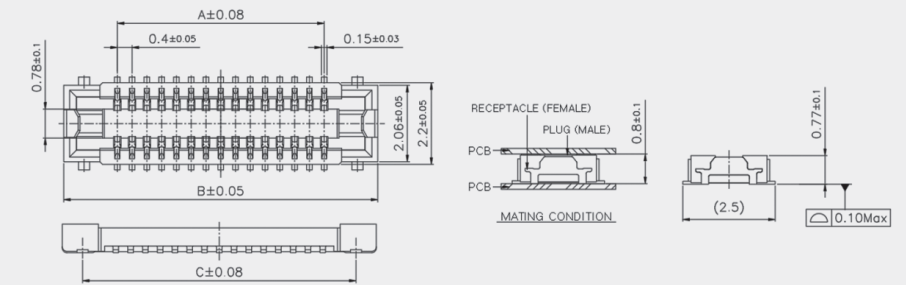
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Female (Receptacle)
- ③ Contact Pitch : 0.40mm
- ④ Type : Insert
- ⑤ No. of position : **P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm
- ⑨ Option

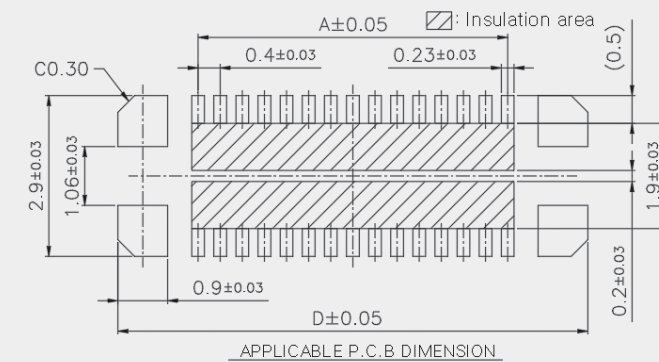
Product Drawing



Female (Receptacle)



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D
BF040-I10B-C08-A	10	1.6	4.5	3.4	4.5
BF040-I12B-C08-A	12	2.0	4.9	3.8	4.9
BF040-I16B-C08-A	16	2.8	5.7	4.6	5.7
BF040-I24B-C08-A	24	4.4	7.3	6.2	7.3
BF040-I30B-C08-A	30	5.6	8.5	7.4	8.5
BF040-I34B-C08-A	34	6.4	9.3	8.2	9.3

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

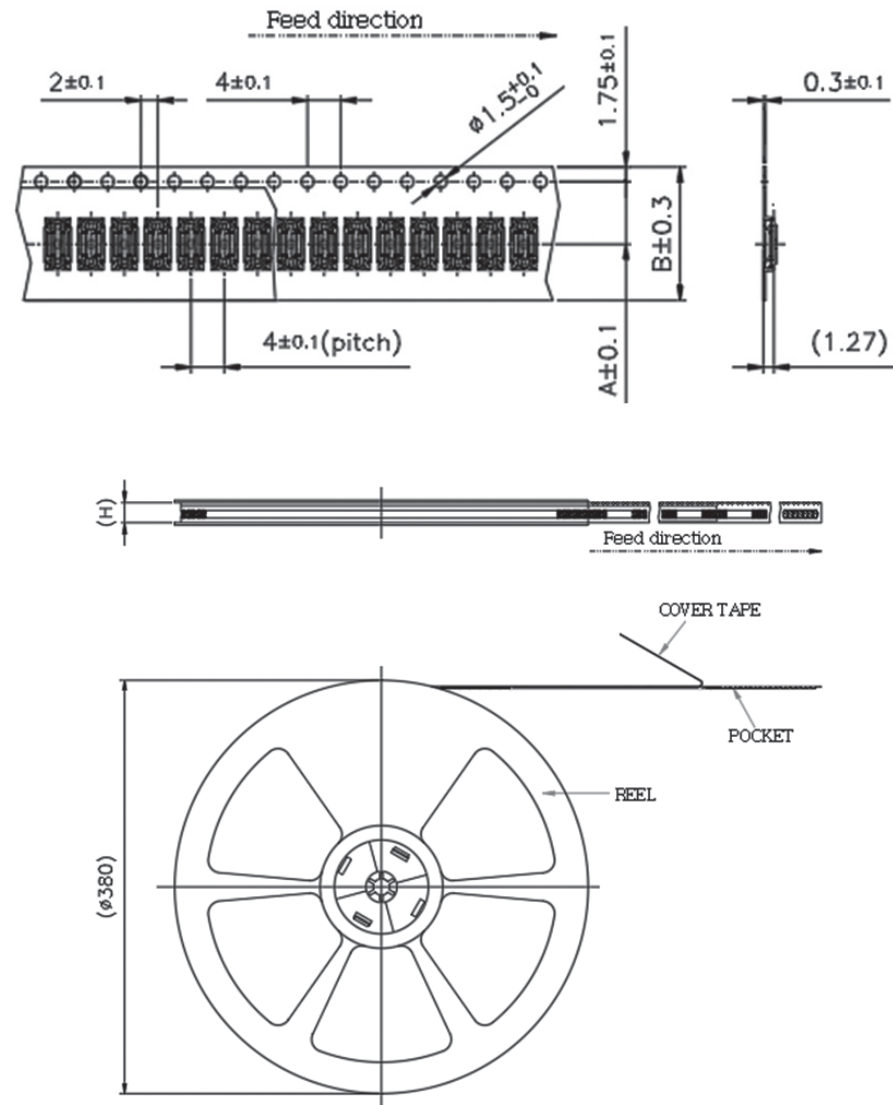
Note 2 : This connector has no polarity.

Board To Board Connector **SW**

Mobile Connector

Female : BF040-I**B-C08-A Male : BM040-I**B-C08-A

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	F	G	H
BF040-I10B-C08-A	10	7.5	16.0	17.4
BF040-I12B-C08-A	12	7.5	16.0	17.4
BF040-I16B-C08-A	16	7.5	16.0	17.4
BF040-I24B-C08-A	24	7.5	16.0	17.4
BF040-I30B-C08-A	30	11.5	24.0	25.4
BF040-I34B-C08-A	34	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **SW**

Mobile Connector

Female : BF040-I**B-C08-A Male : BM040-I**B-C08-A

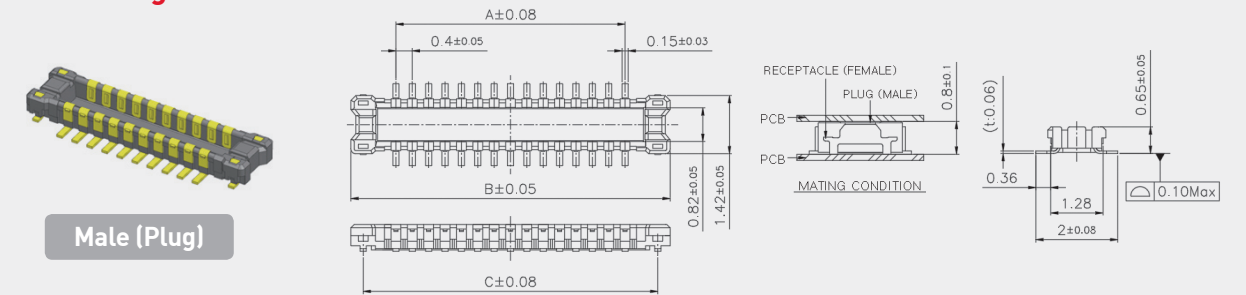
Product Number Structure

B M 040 - I ** B - C 08 - A

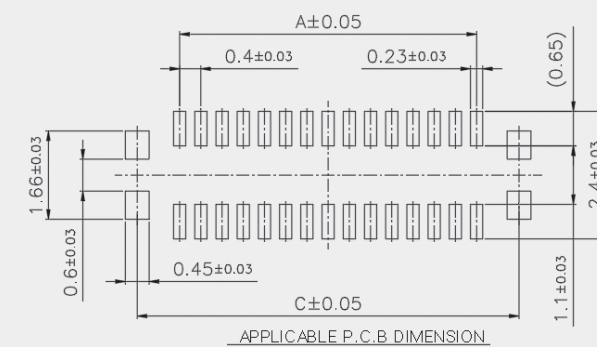
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Male (Plug)
- ③ Contact Pitch : 0.40mm
- ④ Type : Insert
- ⑤ No. of position : **P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm
- ⑨ Option

Product Drawing



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C
BM040-I10B-C08-A	10	1.6	3.8	3.2
BM040-I12B-C08-A	12	2.0	4.2	3.6
BM040-I16B-C08-A	16	2.8	5.0	4.4
BM040-I24B-C08-A	24	4.4	6.6	6.0
BM040-I30B-C08-A	30	5.6	7.8	7.2
BM040-I34B-C08-A	34	6.4	8.6	8.0

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

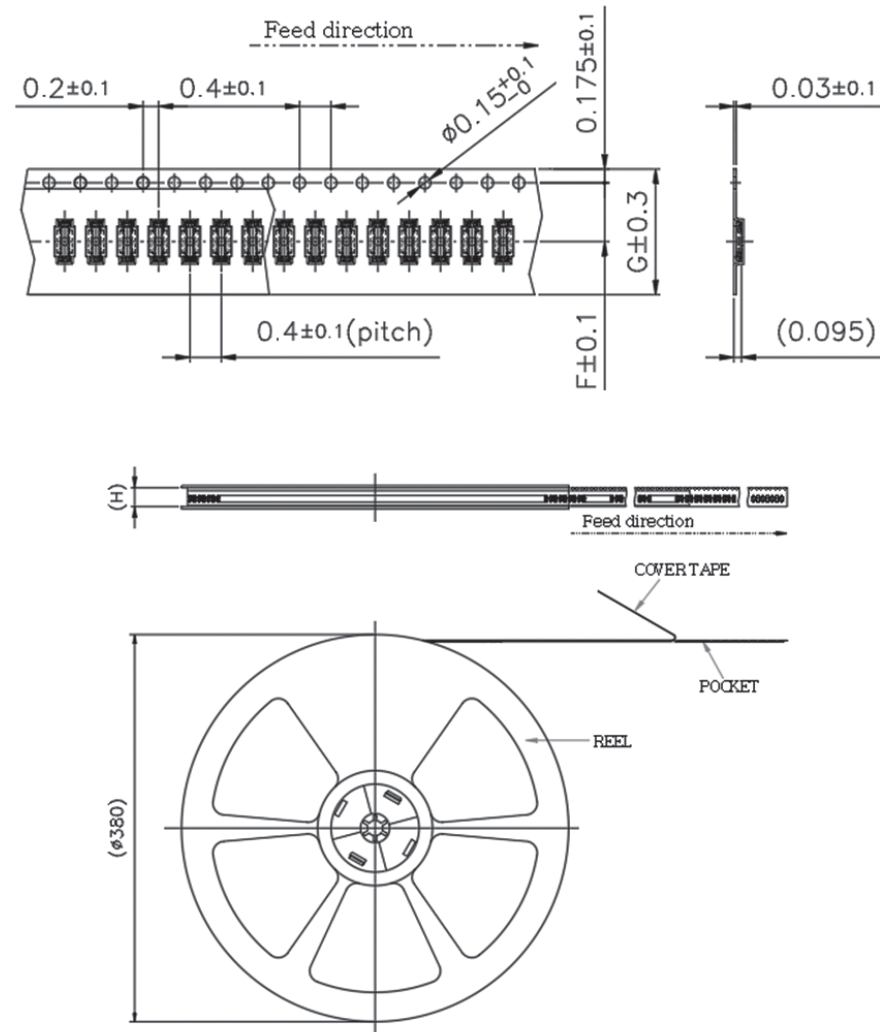
Note 2 : This connector has no polarity.

Board To Board Connector **SW**

Mobile Connector

Female : BF040-I**B-C08-A Male : BM040-I**B-C08-A

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	F	G	H
BF040-I10B-C08-A	10	7.5	16.0	17.4
BF040-I12B-C08-A	12	7.5	16.0	17.4
BF040-I16B-C08-A	16	7.5	16.0	17.4
BF040-I24B-C08-A	24	7.5	16.0	17.4
BF040-I30B-C08-A	30	11.5	24.0	25.4
BF040-I34B-C08-A	34	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 15,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BB**

Mobile Connector

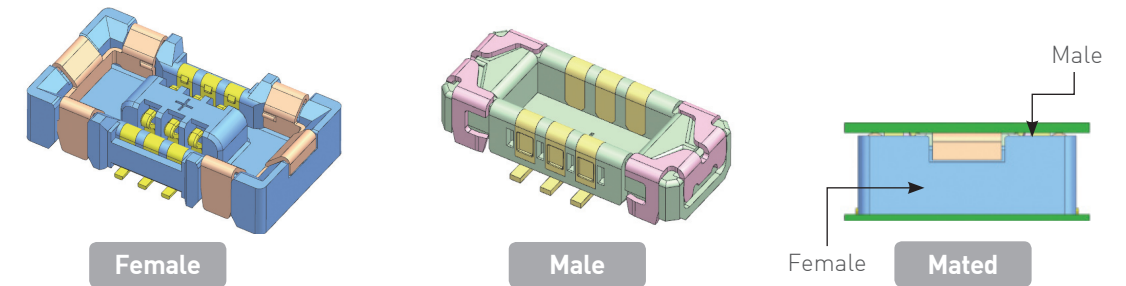
Female : BF035-I**B-C08-A Male : BM035-I**B-C08-A

Applications

- ▶ Smart Phone
- ▶ Smart Watch
- ▶ Tablet PC

Characteristics

- ▶ Compact design and Smaller size



- ▶ For contact stability, Double Contact and Bellows Type Contact Structure
- ▶ Fitting Nail Robust type (Mold Prevention of damage)
- ▶ Female , Male - Terminal Insert Structure
 - 1) Mold Prevention of damage and Reinforcement of strength
 - 2) Improving product quality reliability.

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
0.3A/Pin	50mΩ [Max.]	250V AC(RMS)	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
6	0.35	2.0	0.8	3.55	Female : BF035-I**B-C08-A Male : BM035-I**B-C08-A
10				4.25	

Board To Board Connector **BB**

Mobile Connector

Female : BF035-I**B-C08-A **Male** : BM035-I**B-C08-A

Product Specification

Ratings	Rated current	0.3A/Pin	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35 °C
	Rated voltage	30V AC(RMS)/DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	50mΩ [Max.]	- Open circuit voltage: 20mV (AC) - Test current: 1mA.
2. Insulation resistance	50mΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	Contact resistance : 90mΩ [Max.]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance : 90mΩ [Max.]	- Vibration frequency range : 10-55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance : 90mΩ [Max.]	- Acceleration : 50G (490%) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance : 90mΩ [Max.] 2) Insulation resistance : 25mΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr

9. Solder heat resistance No loose contacts no deformation.

Reflow condition. (Refer to Reflow)

Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Copper Alloy	Au, Ni plated	-
Female Fitting Nail	Phosphor Bronze	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Phosphor Bronze	Au, Ni plated	-

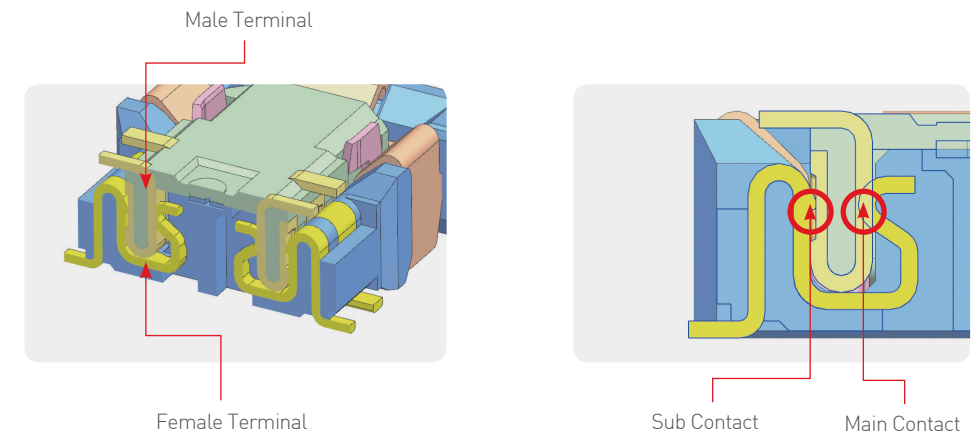
Board To Board Connector **BB**

Mobile Connector

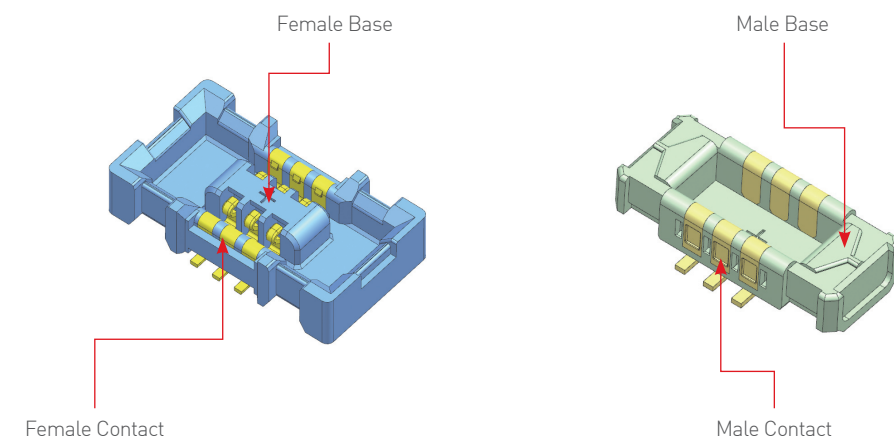
Female : BF035-I**B-C08-A **Male** : BM035-I**B-C08-A

FEATURES AND ADVANTAGES

- Double Contact point for stable contact preservation



- Insert mold Structure



Board To Board Connector **BB**

Mobile Connector

Female : BF035-I**B-C08-A Male : BM035-I**B-C08-A

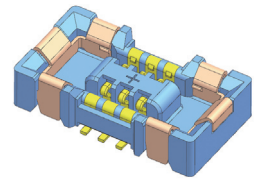
Product Number Structure

B **F** **035** - **I** ****** **B** - **C** **08** - **A**

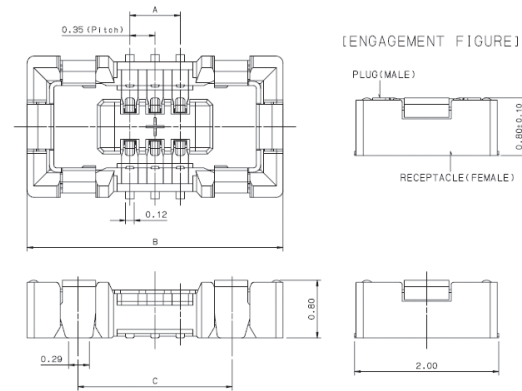
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Female (Receptacle)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 6P or 10P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm
- ⑨ Option

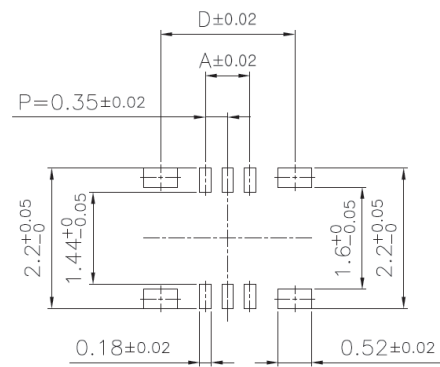
Product Drawing



Female (Receptacle)



Recommended PCB, Metal Mask Layout



【 RECOMMENDED PAD LAYOUT (For Reference) 】

Unit : mm

Product No.	No. of Contacts	A	B	C	D
BF035-I**B-C08-A	6	0.7	3.55	2.14	2.11
	10	1.4	4.25	2.84	2.81

Note 1 : Please place orders in full reel quantities.

[6P 1Reel = 20,000ea, 10P 1Reel = 10,000ea]

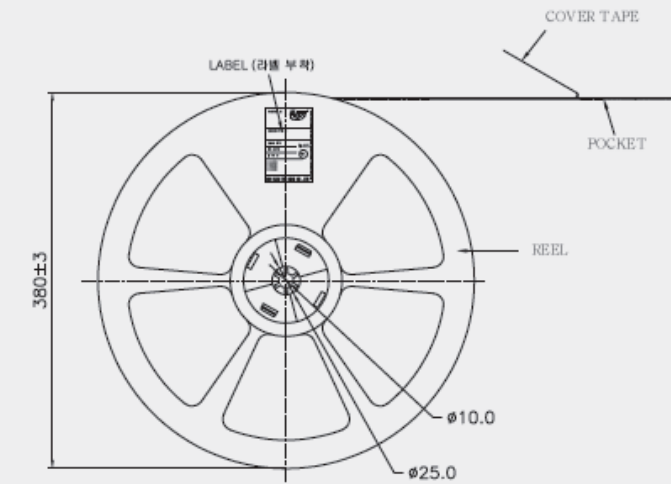
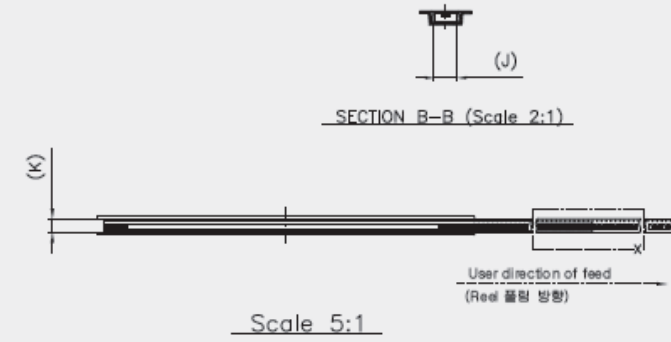
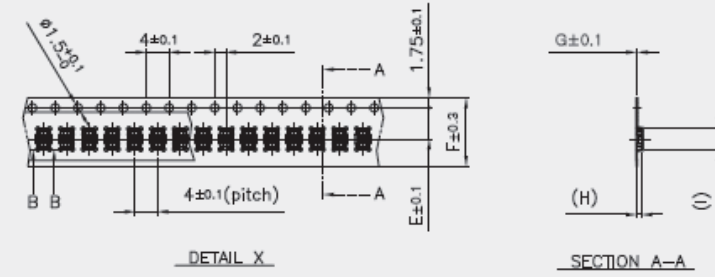
Note 2 : This connector has no polarity.

Board To Board Connector **BB**

Mobile Connector

Female : BF035-I**B-C08-A Male : BM035-I**B-C08-A

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	E	F	G	H	I	J	K
BF035-I**B-C08-A	6	5.5	12	0.2	0.95	3.66	2.07	13.4
	10	7.5	16	0.3	1.1	4.36	2.67	17.4

Note 1 : Please place orders in full reel quantities.

[6P 1Reel = 20,000ea, 10P 1Reel = 10,000ea]

Note 2 : This connector has no polarity.

Board To Board Connector **BB**

Mobile Connector

Female : BF035-I**B-C08-A Male : BM035-I**B-C08-A

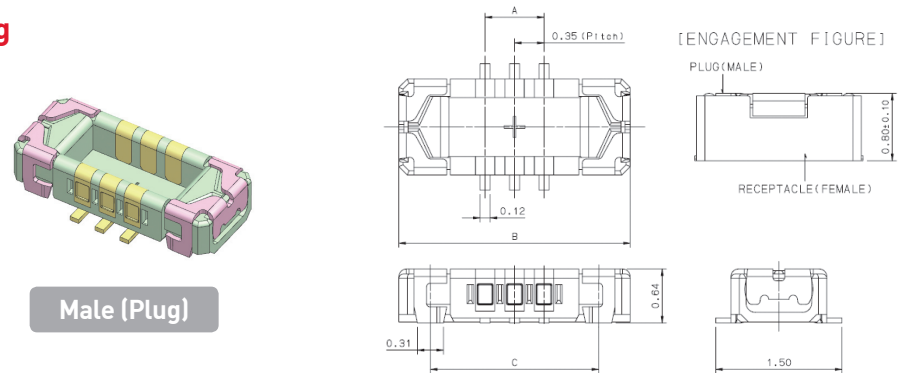
Product Number Structure

B **M** **035** - **I** ****** **B** - **C** **08** - **A**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

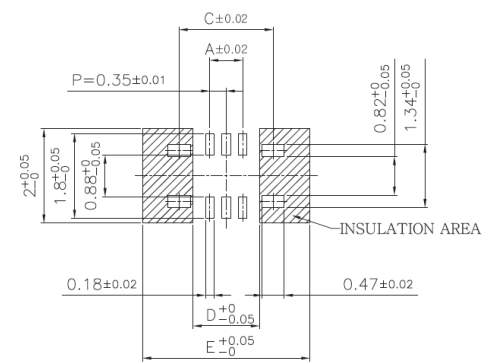
- ① Type of connectors : Board to Board
- ② Style : Male (Plug)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 6P or 10P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm
- ⑨ Option

Product Drawing



Male (Plug)

Recommended PCB, Metal Mask Layout



【 RECOMMENDED PAD LAYOUT (For Reference) 】 (Insulation area)

Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
BM035-I**B-C08-A	6	0.7	2.75	2.0	1.41	3.55
	10	1.4	3.25	2.7	2.11	4.25

Note 1 : Please place orders in full reel quantities.

[6P 1Reel = 20,000ea, 10P 1Reel = 10,000ea]

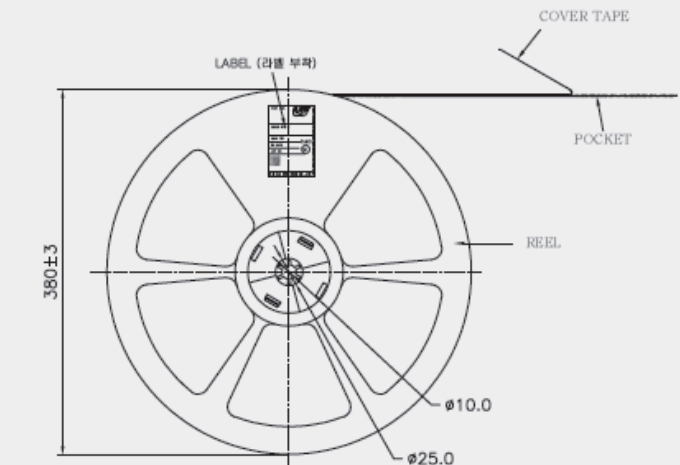
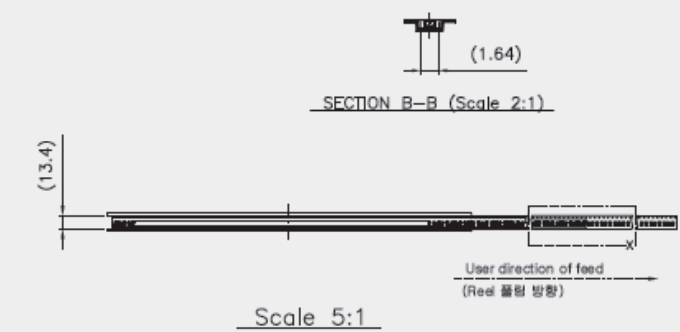
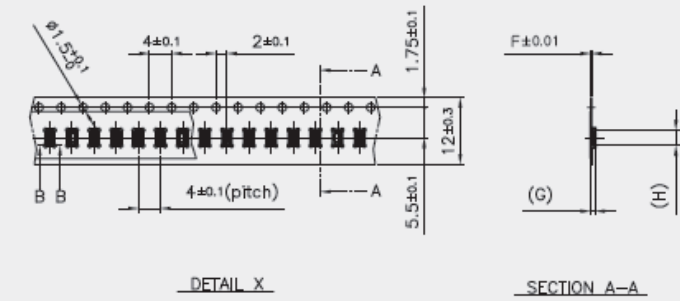
Note 2 : This connector has no polarity.

Board To Board Connector **BB**

Mobile Connector

Female : BF035-I**B-C08-A Male : BM035-I**B-C08-A

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	E	G	H
BM035-I**B-C08-A	6	0.2	0.78	2.85
	10	0.3	0.88	3.55

Note 1 : Please place orders in full reel quantities.

[6P 1Reel = 20,000ea, 10P 1Reel = 10,000ea]

Note 2 : This connector has no polarity.

Board To Board Connector RA

Mobile Connector

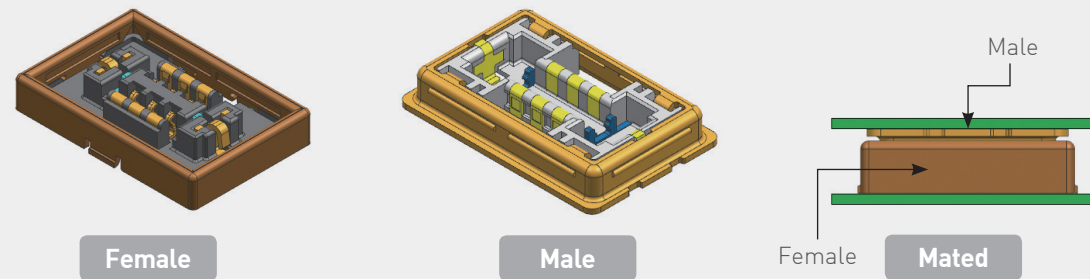
Female : BF035-I08B-C07-A Male : BM035-I08B-C07-A

Applications

- ▶ Smart Phone

Characteristics

- ▶ Fully-Shielded Structure
- ▶ Compact design and Smaller size



- ▶ 5G mmWave (20+ Gbps) High-frequency, High-speed transmission response
- ▶ EMI performance with Full Shield design
- ▶ Shielding function Metal Ground
- ▶ For Signal contact stability, Double Contact and Bellows Type Contact Structure
- ▶ 0.35mm pitch, 0.7mm slim stacking design for saving space
- ▶ Female , Male – Terminal Insert Structure
 - 1) Prevention of Base damage
 - 2) Improving product quality reliability

Specifications

Rated Current	Contact Resistance	Dielectric Strength	Temperature Range
Signal 0.3A/Pin IF 2.0A/Pi	50mΩ [Max.]	250V AC(RMS)	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Lenght	Product No.
8	0.35(Signal)	2.40	0.70	3.50	Female : BF035-I08B-C07-A Male : BM035-I08B-C07-A

Board To Board Connector RA

Mobile Connector

Female : BF035-I08B-C07-A Male : BM035-I08B-C07-A

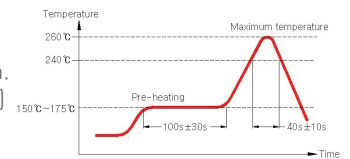
Product Specification

Ratings	Rated current	Signal : 0.3A/Pin IF : 2.0A/Pin	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35 °C
	Rated voltage	30V AC(RMS)/DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	50mΩ [Max.]	- Open circuit voltage: 20mV (AC) - Test current: 1mA.
2. Insulation resistance	50MΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 3.57kgf [Max.] 2) Separation force : 0.51kgf [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	Contact resistance : 70mΩ [Max.]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance : 70mΩ [Max.]	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance : 70mΩ [Max.]	- Acceleration : 50G (490%) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	Contact resistance : 70mΩ [Max.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr

9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)
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Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Signal Terminal	Phosphor Bronze	Au, Ni plated	-
Female IF Terminal	Copper Alloy	Au, Ni plated	-
Female Metal Wall	Copper Alloy	Au, Ni plated	-
Female Metal Ground	Copper Alloy	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Signal Terminal	Phosphor Bronze	Au, Ni plated	-
Male IF Terminal	Copper Alloy	Au, Ni plated	-
Male Metal Wall	Copper Alloy	Au, Ni plated	-
Male Metal Ground	Copper Alloy	Au, Ni plated	-

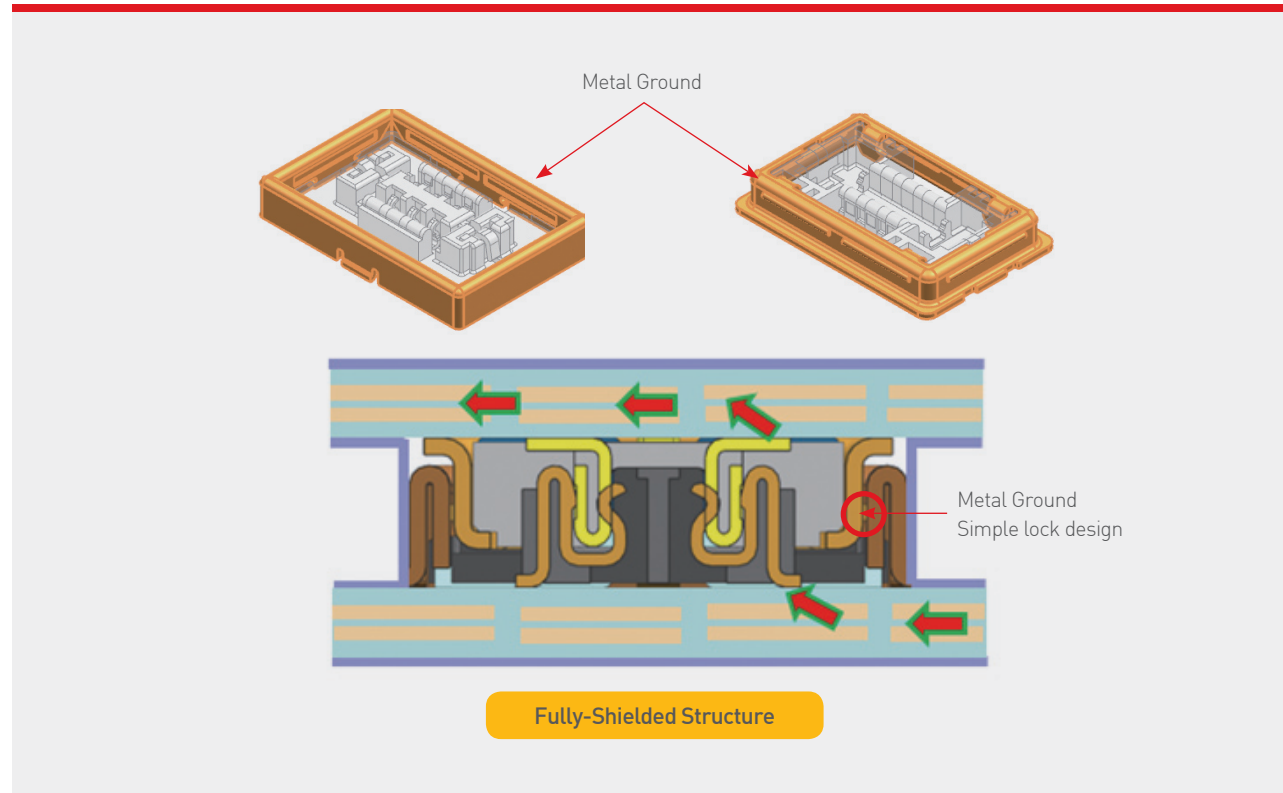
Board To Board Connector RA

Mobile Connector

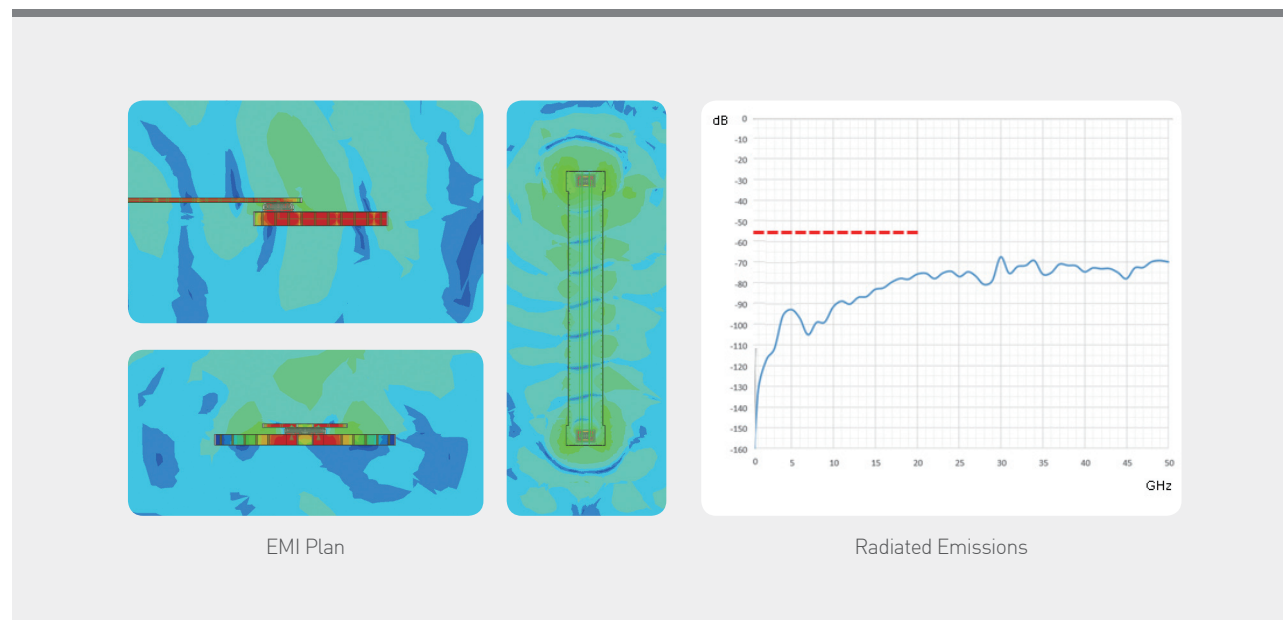
Female : BF035-I08B-C07-A Male : BM035-I08B-C07-A

FEATURES AND ADVANTAGES

► Shielding function Meta Ground



► EMI performance with Full Shield design



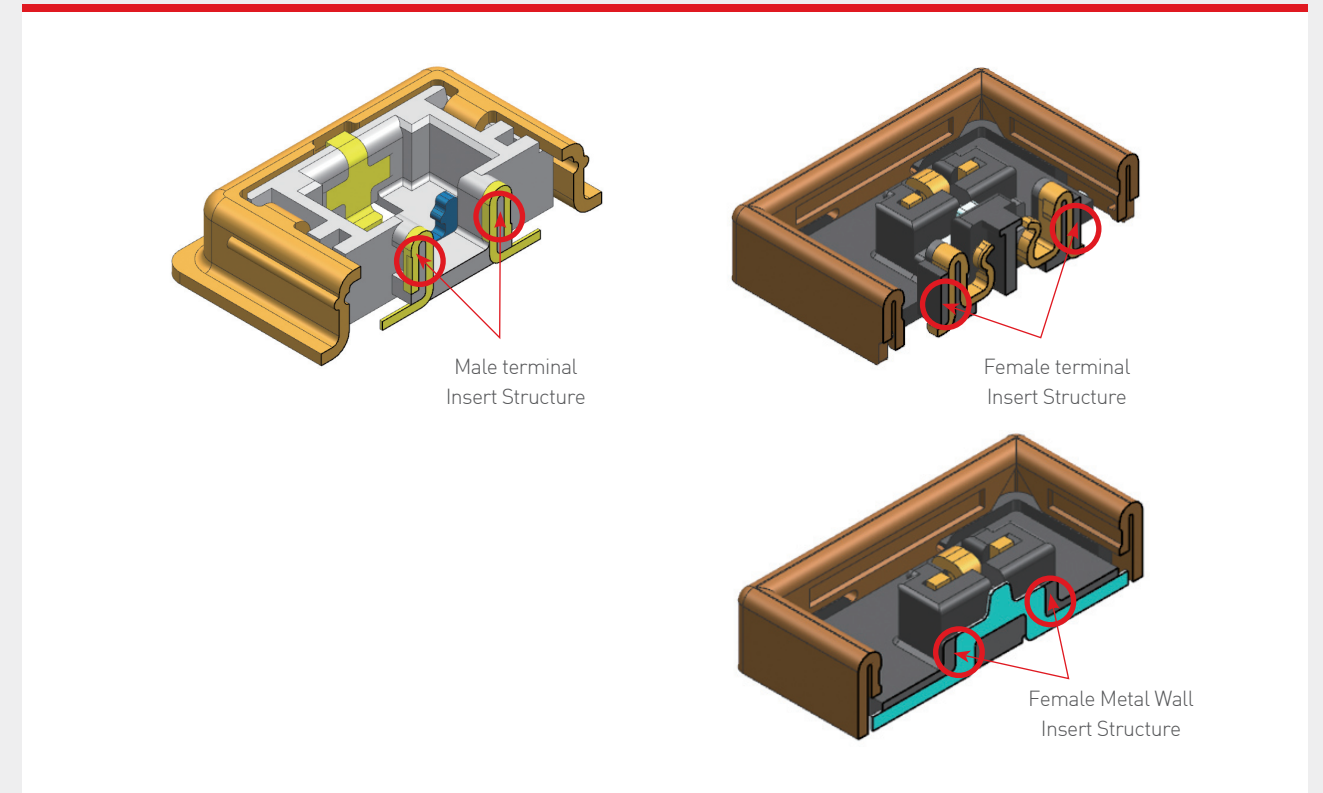
Board To Board Connector RA

Mobile Connector

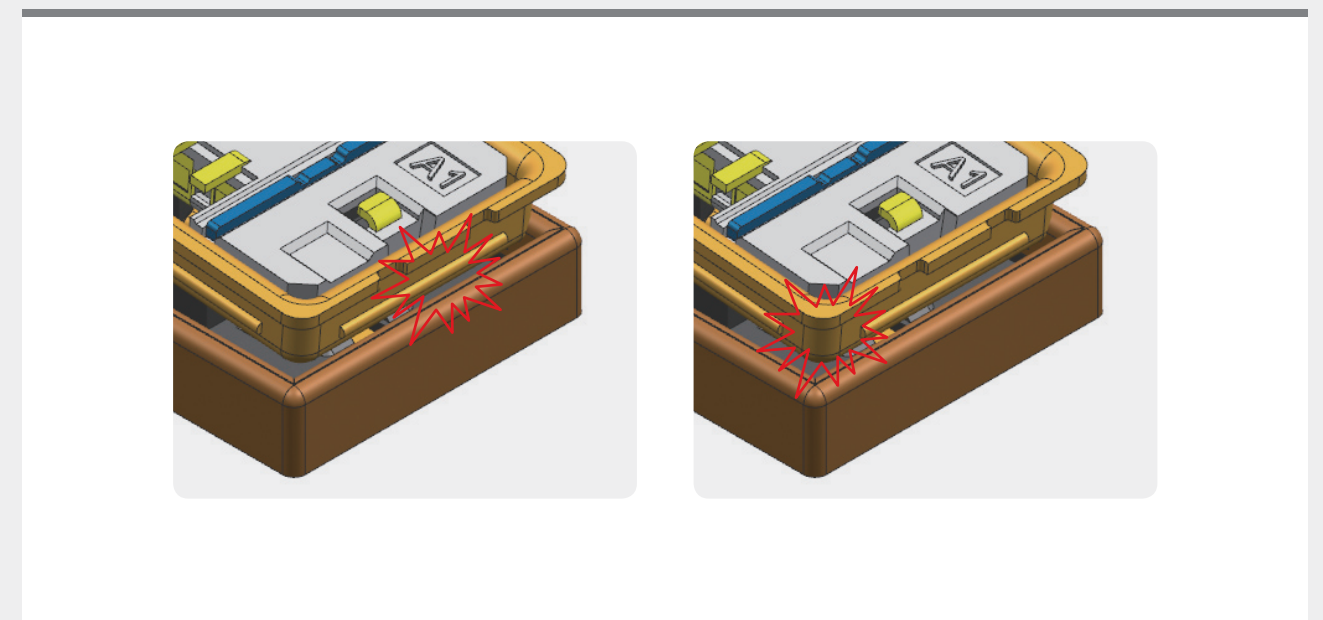
Female : BF035-I08B-C07-A Male : BM035-I08B-C07-A

FEATURES AND ADVANTAGES

► Insert Structure for preventing Lead solder over rise



► Structure for prevention of Base damage



Board To Board Connector RA

Mobile Connector

Female : BF035-I08B-C07-A Male : BM035-I08B-C07-A

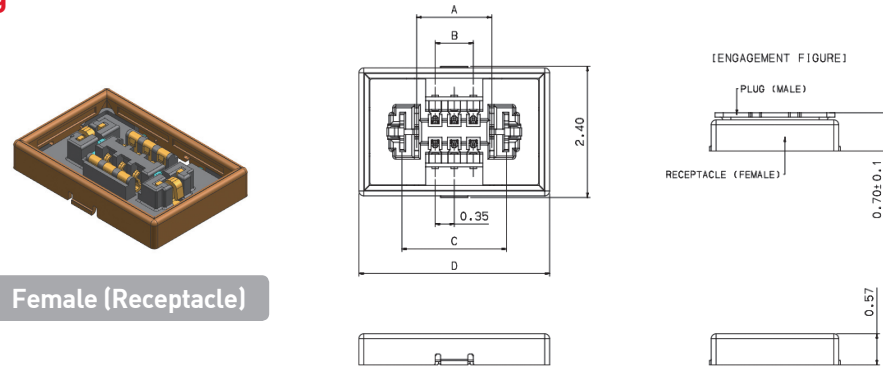
Product Number Structure

B **F** **035** - **I** **08 B** - **C** **07** - **A**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

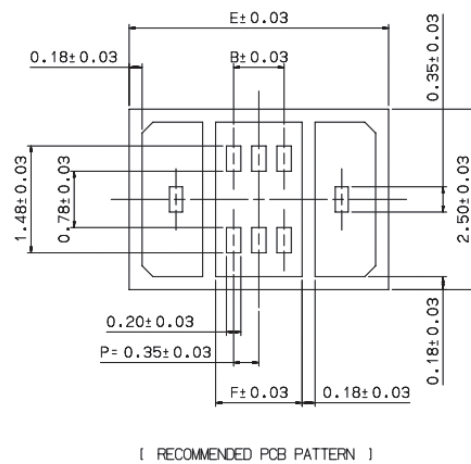
① Type of connectors : Board to Board	② Style : Female (Receptacle)
③ Contact Pitch : 0.35mm	④ Type : Insert
⑤ No. of position : 8P	⑥ Test of on board : Board on
⑦ Shape symbol : With Fitting Nail	⑧ Connector Height : 0.7mm
	⑨ Option

Product Drawing



Female (Receptacle)

Recommended PCB, Metal Mask Layout



[RECOMMENDED PCB PATTERN]

Unit : mm

Product No.	No. of Contacts	A	B	C	D	E	F
BF035-I08B-C07-A	Signal 6, IF 2	1.38	0.70	1.92	3.50	3.60	1.20

Note 1 : Please place orders in full reel quantities. (1Reel = 7,000ea)

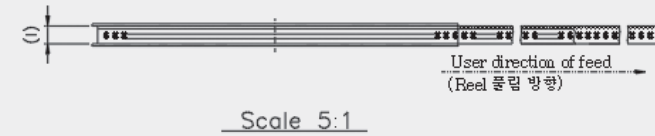
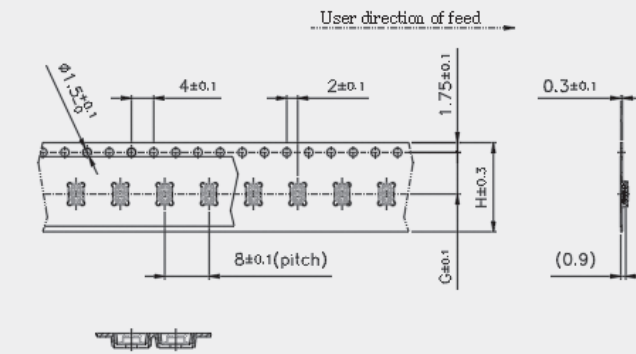
Note 2 : This connector has no polarity.

Board To Board Connector RA

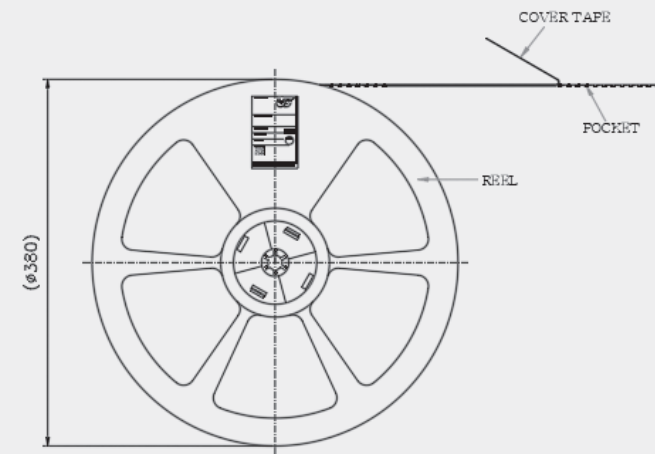
Mobile Connector

Female : BF035-I08B-C07-A Male : BM035-I08B-C07-A

Embossed Tape Dimensions



Scale 5:1



Unit : mm

Product No.	No. of Contacts	G	H	I
BF035-I08B-C07-A	Signal 6, IF 2	7.5	16.0	17.4

Note 1 : Please place orders in full reel quantities. (1Reel = 7,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector RA

Mobile Connector

Female : BF035-I08B-C07-A Male : BM035-I08B-C07-A

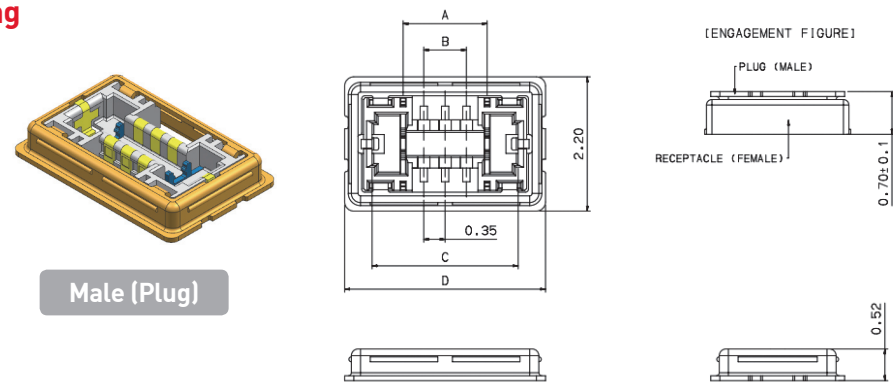
Product Number Structure

B **M** **035** - **I** **08** **B** - **C** **08** - **A**

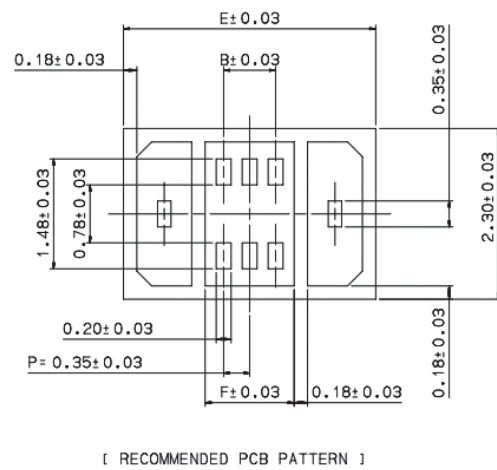
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Male (Plug)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 8P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.7mm
- ⑨ Option

Product Drawing



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E	F
BM035-I08B-C07-A	Signal 6, IF 2	1.38	0.70	2.40	3.30	3.40	1.20

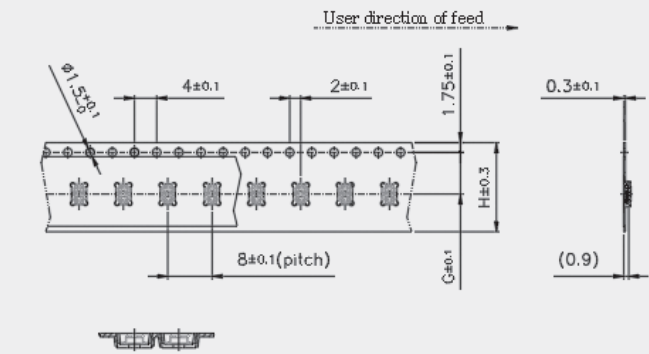
Note 1 : Please place orders in full reel quantities. (1Reel = 7,000ea)
 Note 2 : This connector has no polarity.

Board To Board Connector RA

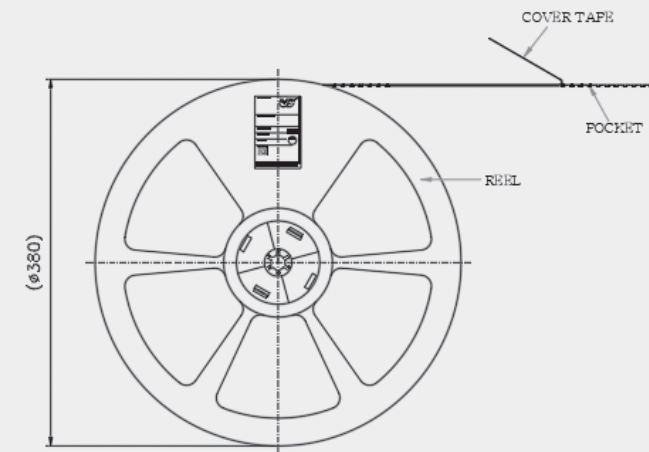
Mobile Connector

Female : BF035-I08B-C07-A Male : BM035-I08B-C07-A

Embossed Tape Dimensions



Scale 5:1



Unit : mm

Product No.	No. of Contacts	G	H	I
BM035-I08B-C07-A	Signal 6, IF 2	7.5	16.0	17.4

Note 1 : Please place orders in full reel quantities. (1Reel = 7,000ea)
 Note 2 : This connector has no polarity.

Board To Board Connector **THIN**

Mobile Connector

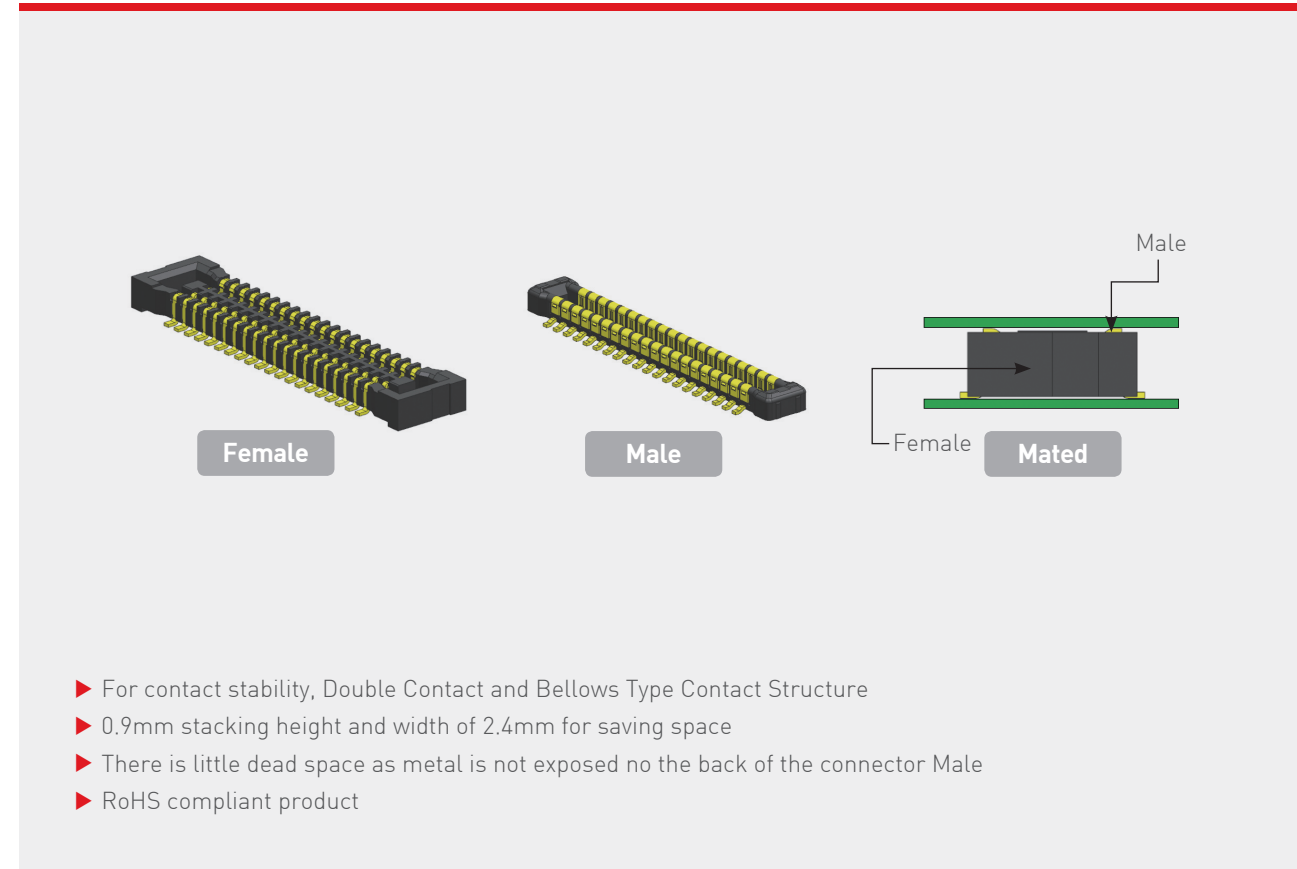
Female : BF040-I40B-N09-C **Male** : BM040-I40B-N09-C

Applications

- ▶ Smart Phone
- ▶ Smart Watch
- ▶ Tablet PC

Characteristics

- ▶ Compact design and Smaller size



Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
0.3A	50mΩ [Max.]	250V AC(RMS)	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Lenght	Product No.
40	0.40	2.40	0.90	10.6	Female : BF040-I40B-N09-C Male : BM040-I40B-N09-C

Board To Board Connector **THIN**

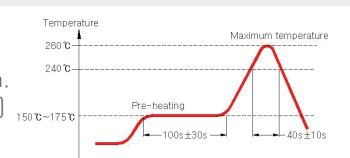
Mobile Connector

Female : BF040-I40B-N09-C **Male** : BM040-I40B-N09-C

Product Specification

Ratings	Rated current	0.3A/Pin	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35 °C
	Rated voltage	30V AC(RMS)/DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	50mΩ [Max.]	- Open circuit voltage: 20mV [AC] - Test current: 1mA.
2. Insulation resistance	50MΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	Contact resistance : 90mΩ [Max.]	1) When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	Discontinuity : 1.0 microsec. [Max.]	- Vibration frequency range : 10-55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock	Discontinuity : 1.0 microsec. [Max.]	- Acceleration : 50G (490m/s ²) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance - 90mΩ [Max.] 2) Insulation resistance : 25MΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow) 

Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Copper Alloy	Au plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au plated	-

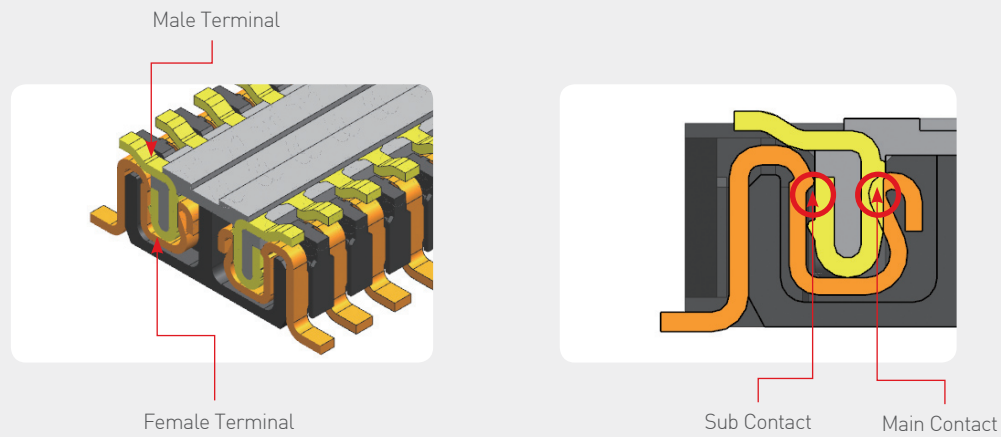
Board To Board Connector **THIN**

Mobile Connector

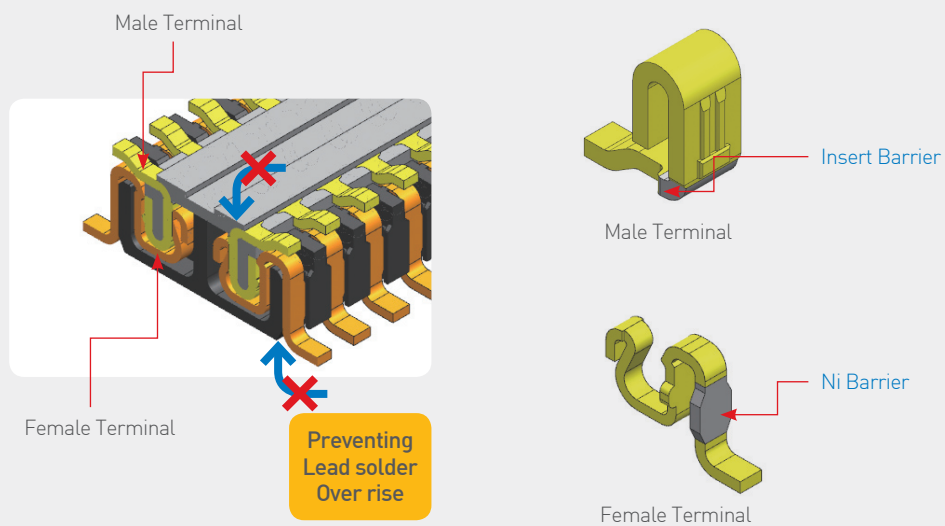
Female : BF040-I40B-N09-C Male : BM040-I40B-N09-C

FEATURES AND ADVANTAGES

► Double Contact point for stable contact preservation



► Ni Barrier for preventing Lead solder over rise



Board To Board Connector **THIN**

Mobile Connector

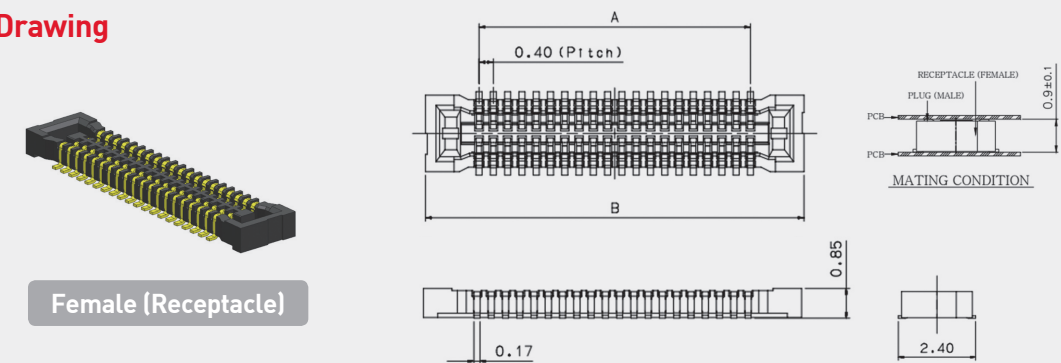
Female : BF040-I40B-N09-C Male : BM040-I40B-N09-C

Product Number Structure

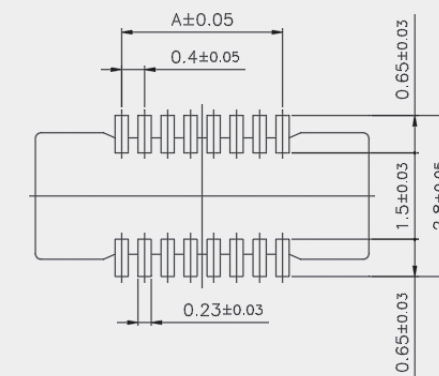
B **F** **040** - **I** **40** **B** - **N** **09** - **C**
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- | | |
|---------------------------------------|-------------------------------|
| ① Type of connectors : Board to Board | ② Style : Female (Receptacle) |
| ③ Contact Pitch : 0.40mm | ④ Type : Insert |
| ⑤ No. of position : 40P | ⑥ Test of on board : Board on |
| ⑦ Shape symbol : Non | ⑧ Connector Height : 0.9mm |
| | ⑨ Option |

Product Drawing



Recommended PCB , Metal Mask Layout



【 APPLICABLE P.C.B DIMENSION 】

Unit : mm

Product No.	No. of Contacts	A	D
BF040-I40B-N09-C	40	7.60	10.60

Note 1 : Please place orders in full reel quantities. (1Reel = 7,000ea)

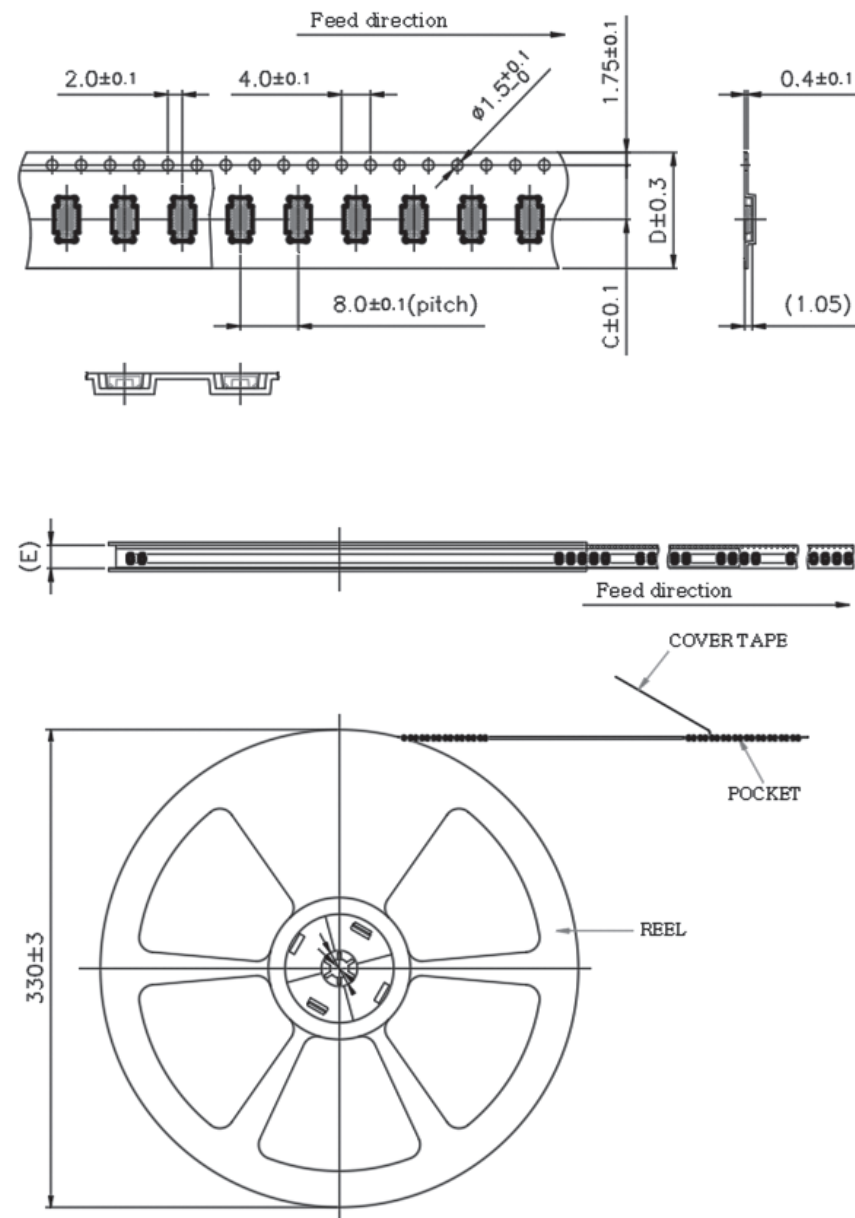
Note 2 : This connector has no polarity.

Board To Board Connector **THIN**

Mobile Connector

Female : BF040-I40B-N09-C Male : BM040-I40B-N09-C

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	C	D	E
BF040-I40B-N09-C	40	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **THIN**

Mobile Connector

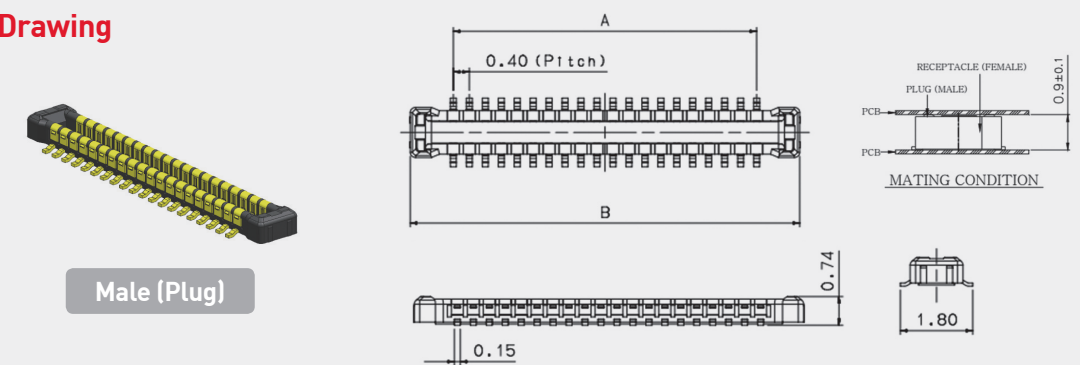
Female : BF040-I40B-N09-C Male : BM040-I40B-N09-C

Product Number Structure

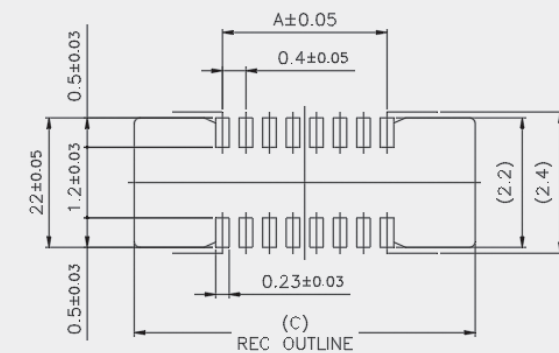
B F 040 - I 40 B - N 09 - C
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Female (Receptacle)
- ③ Contact Pitch : 0.40mm
- ④ Type : Insert
- ⑤ No. of position : 40P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : Non
- ⑧ Connector Height : 0.9mm
- ⑨ Option

Product Drawing



Recommended PCB , Metal Mask Layout



【 APPLICABLE P.C.B DIMENSION 】

Unit : mm

Product No.	No. of Contacts	A	B	C
BM040-I40B-N09-C	40	7.60	9.76	10.60

Note 1 : Please place orders in full reel quantities. (1Reel = 7,000ea)

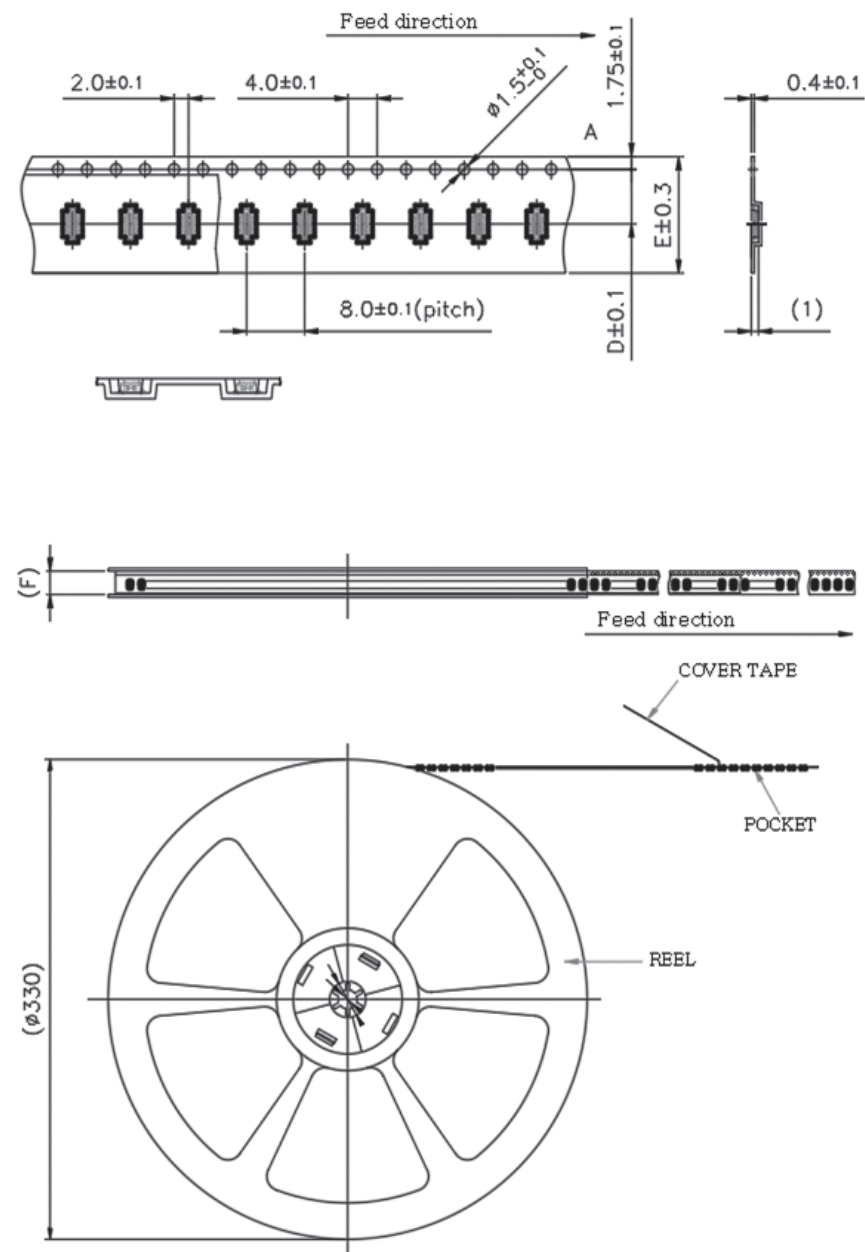
Note 2 : This connector has no polarity.

Board To Board Connector **THIN**

Mobile Connector

Female : BF040-I40B-N09-C Male : BM040-I40B-N09-C

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	D	E	F
BM040-I40B-N09-C	40	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

Floating Board To Board Connector **VB1**

Automotive Connector

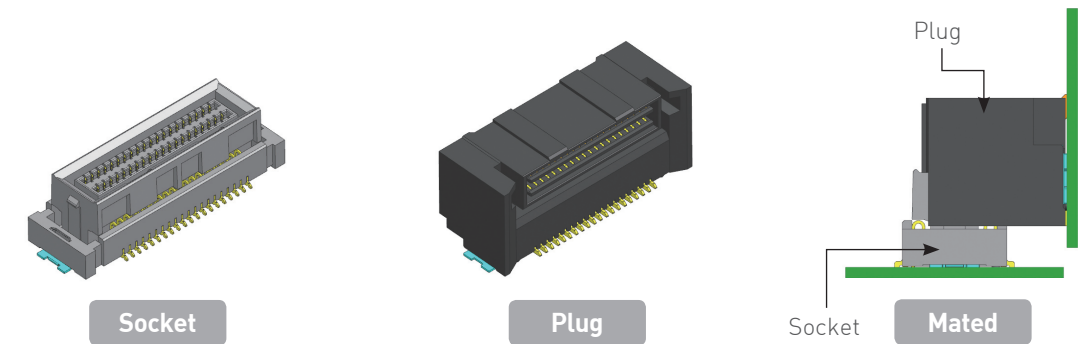
Female : BF100-V40T-C159 Male : BM100-V40T-C159

Applications

- ▶ SAutomotive inverter

Characteristics

- ▶ Floating Structure for Vibration Resistance
- ▶ Floating range ±0.5mm in X, Y direction



- ▶ Floating structure for absorbing Vibration in the X, Y, Z direction
- ▶ Floating range ±0.5mm in X, Y direction
- ▶ Large guide chamfer for mating misalignment prevention
- ▶ Double Contact, Mating length 1.5mm for Contact stability
- ▶ 1.0mm Pitch, 15.9mm mating height

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
0.5A	50mΩ [Max.]	250V AC(RMS)	-35°C ~ 105°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Lenght	Product No.
40	1.00	(15.8)	(15.95)	32.5	Female : BF100-V40T-C159 Male : BM100-V40T-C159

Floating Board To Board Connector VB1

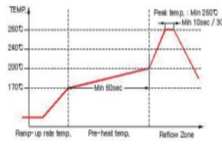
Automotive Connector

Female : BF100-V40T-C159 Male : BM100-V40T-C159

Product Specification

Ratings	Rated current	0.5A/Pin	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35 °C
	Rated voltage	50V AC(RMS)/DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Voltage drop	50mΩ [Max.]	Test according to the following conditions. - Power supply 0 V to 20 V DC at 0 A to 150 A. - Current shunts.
2. Insulation resistance	100MΩ [Min.]	500V DC
3. Withstanding voltage	No flashover or dielectric breakdown	500V AC(RMS) for 1minute
4. Dry Circuit Resistance	50mΩ [Max.]	Insert / Remove the product at a speed of 50mm±10/min.
5. Connector to connector engagement / disengagement force	7.5kgf [Max.]	Test according to the following conditions. Measure and record the resistance between A & B, as shown in the figure below. Then deduct the 150mm conductor resistance (B and C) to find the total connection dry circuit resistance (D and E). - Test Current: 100mA (DC) - Test Voltage: 20mV
6. Thermal shock	1) Appearance : No damage, loose part no crack. 2) Contact resistance : 80mΩ Max	Test according to the following conditions. -Test conditions : -40°C (30 minutes) → 125°C (30 minutes) -Number and duration of the test : 300 times, 12 days - Preprocessing : 24hr - Bath temperature : 85°C / Humidity : 85% - Reflow temperature profile is below (Peak 260°C , 10s, 3cycles Min.)
7. Solder heat resistance	There will be no peeling or deformation. No abnormalities in appearance and structure.	

Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Copper Alloy	Au, Ni plated	-
Female Fitting Nail	Phosphor Bronze	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Phosphor Bronze	Au, Ni plated	-

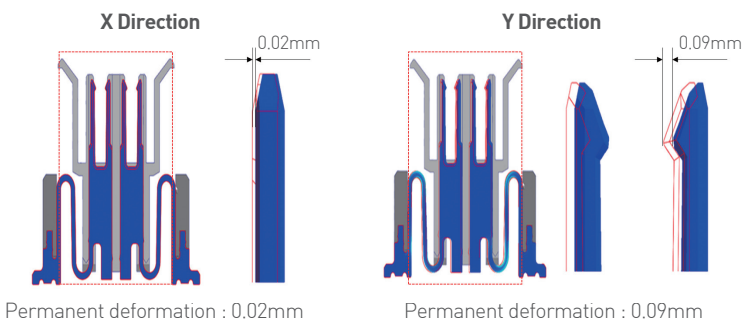
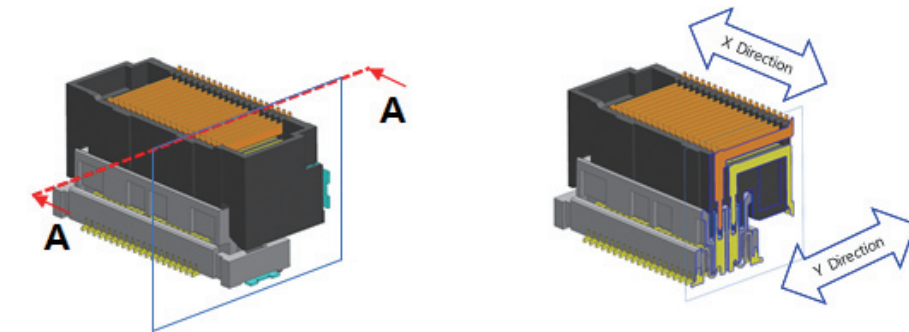
Floating Board To Board Connector VB1

Automotive Connector

Female : BF100-V40T-C159 Male : BM100-V40T-C159

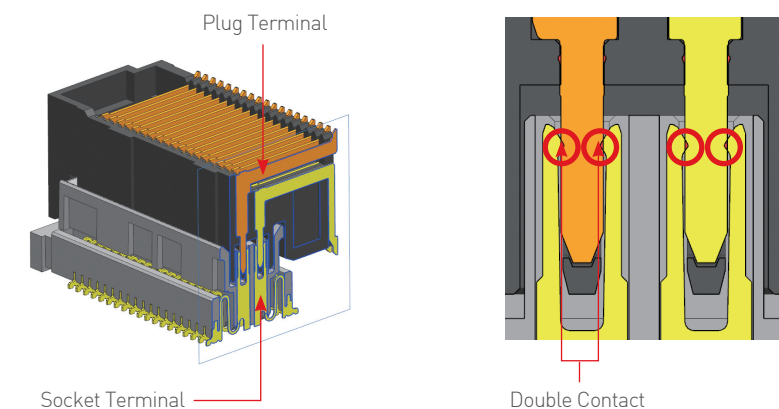
FEATURES AND ADVANTAGES

- Floating Structure for Vibration Resistance (Floating Range ±0.5mm in X, Y direction)



Permanent deformation 0.1mm under on simulation result at X, Y direction distance Max 0.5mm.

- Double Contact point for stable contact preservation



Floating Board To Board Connector VB1

Automotive Connector

Female : BF100-V40T-C159 Male : BM100-V40T-C159

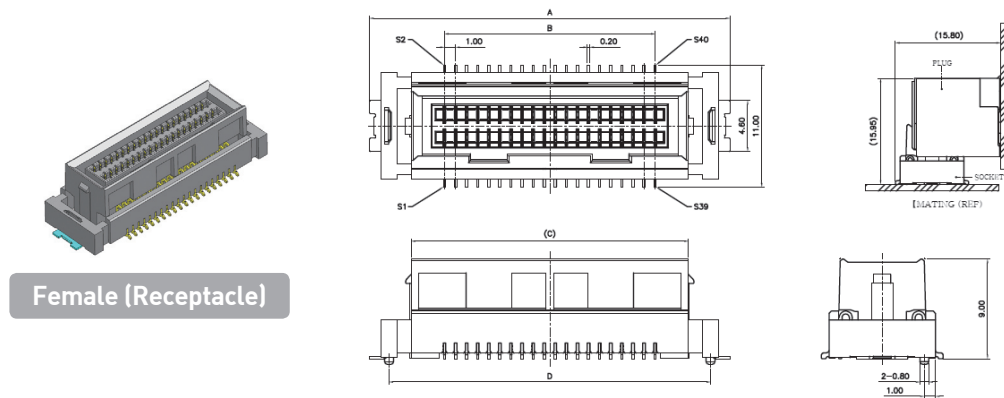
Product Number Structure

B **F** **100** - **V** **40** **T** - **C** **159**

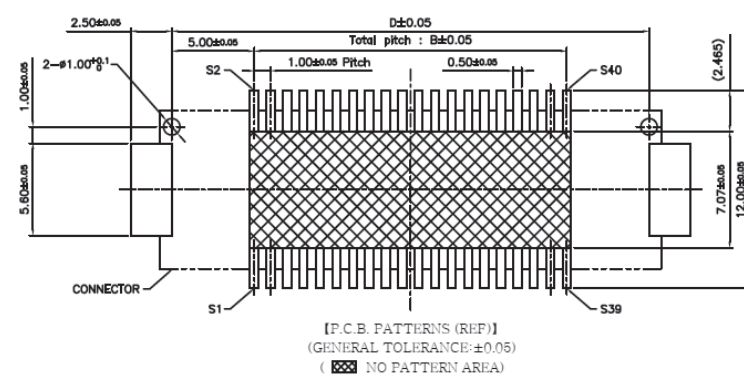
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : Board to Board
- ② Style : Socket
- ③ Contact Pitch : 1.00mm
- ④ Type : Vertical
- ⑤ No. of position : 40P
- ⑥ Test of on board : Through hole
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 15.9mm

Product Drawing



Recommended PCB, Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D
BF100-V40T-C159	40	32.50	19.00	25.00	29.00

Note 1 : Please place orders in full reel quantities. (1Reel = 400ea)

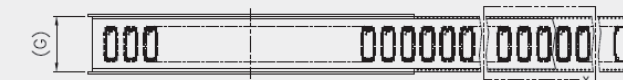
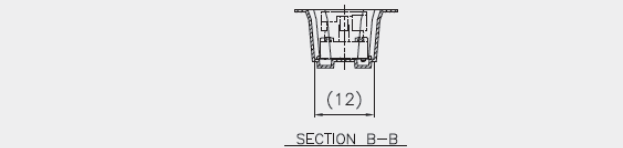
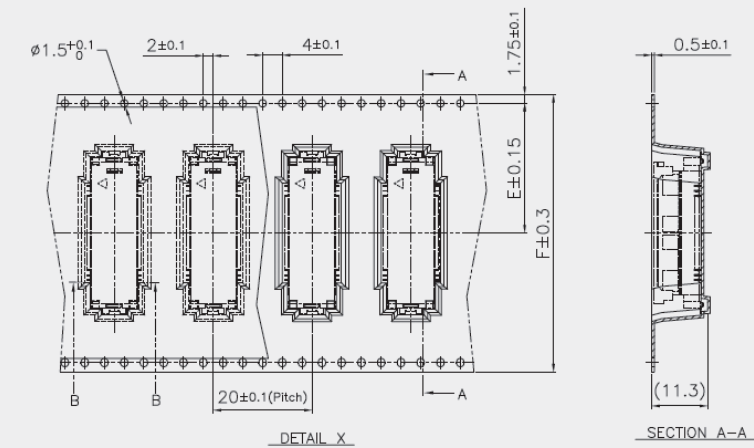
Note 2 : This connector has no polarity.

Floating Board To Board Connector VB1

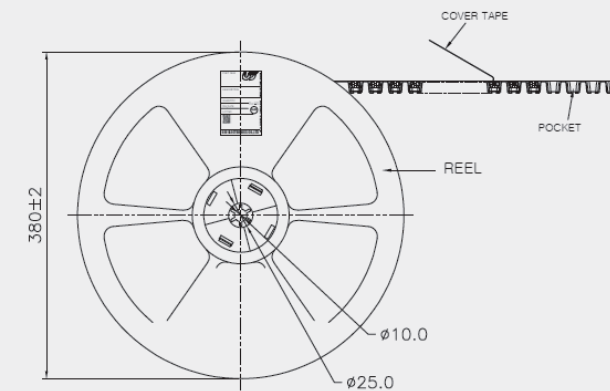
Automotive Connector

Female : BF100-V40T-C159 Male : BM100-V40T-C159

Embossed Tape Dimensions



USER DIRECTION OF FEED
(REEL 풀림 방향)



Unit : mm

Product No.	No. of Contacts	E	F	G
BF100-V40T-C159	40	26.2	56.0	57.4

Note 1 : Please place orders in full reel quantities. (1Reel = 400ea)

Note 2 : This connector has no polarity.

Floating Board To Board Connector VB1

Automotive Connector

Female : BF100-V40T-C159 Male : BM100-V40T-C159

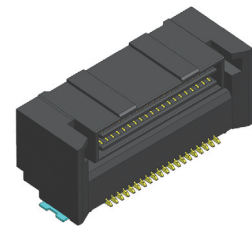
Product Number Structure

B M 100 - V 40 T - C 159

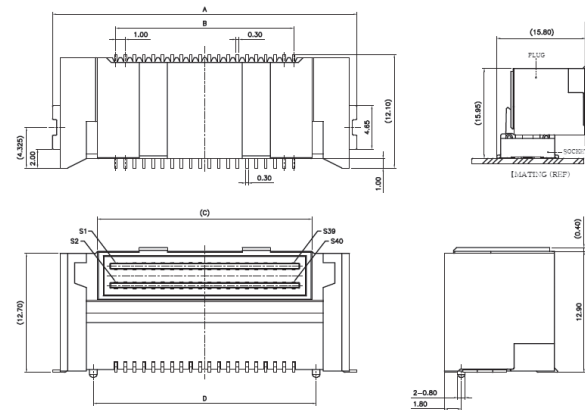
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : Board to Board
- ② Style : Plug
- ③ Contact Pitch : 1.00mm
- ④ Type : Vertical
- ⑤ No. of position : 40P
- ⑥ Test of on board : Through hole
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 15.9mm

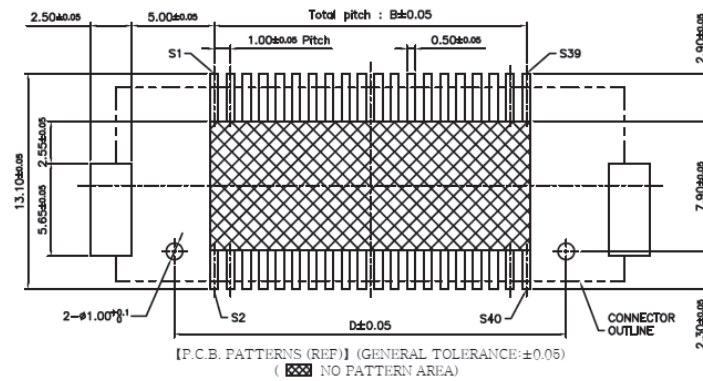
Product Drawing



Male (Plug)



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D
BM100-V40T-C159	40	32.50	19.00	22.90	23.80

Note 1 : Please place orders in full reel quantities. (1Reel = 250ea)

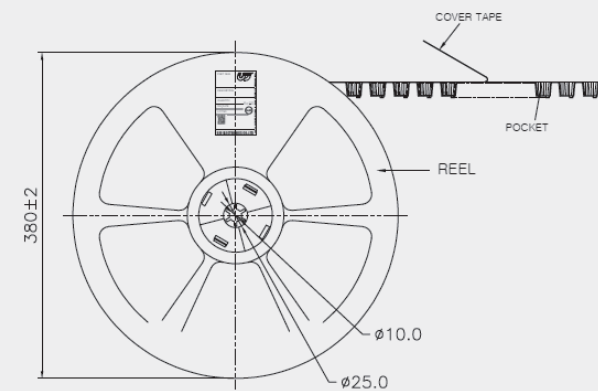
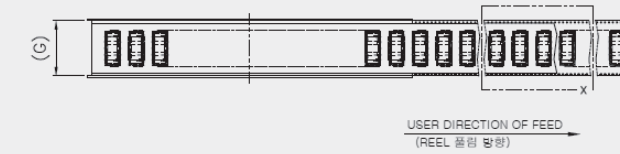
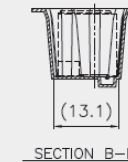
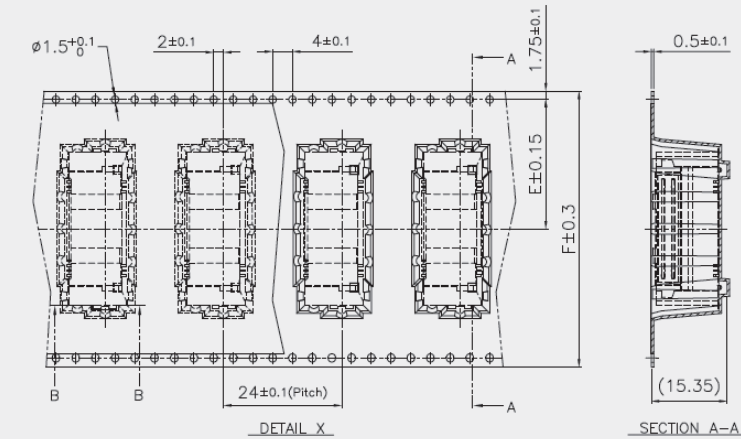
Note 2 : This connector has no polarity.

Floating Board To Board Connector VB1

Automotive Connector

Female : BF100-V40T-C159 Male : BM100-V40T-C159

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	E	F	G
BM100-V40T-C159	40	26.2	56.0	57.4

Note 1 : Please place orders in full reel quantities. (1Reel = 250ea)

Note 2 : This connector has no polarity.

Camera Module Connector VC1

Mobile Connector

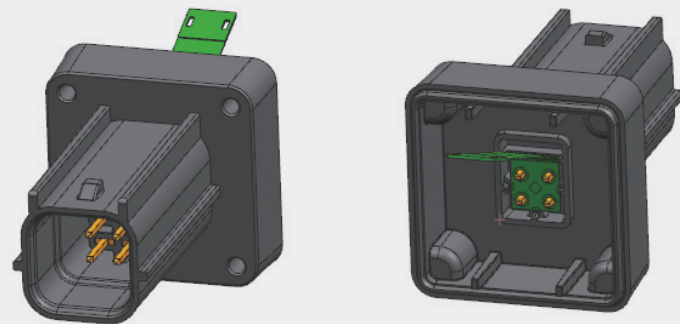
IM300-L04T-N339

Applications

- ▶ Automotive Camera

Characteristics

- ▶ Camera Module Bottom
- ▶ Waterproof Type



- ▶ 3.0mm Pitch, 33.9mm Height
- ▶ Performance for automotive connector systems

Specifications

Current Rating	Voltage Rating	Temperature Range
2.5A	AC/DC 12V	-35°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	Product No.
4	3.0	23.4	33.9	23.4	IM300-L04T-N339

Camera Module Connector VC1

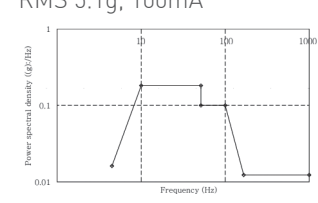
Mobile Connector

IM300-L04T-N339

Product Specification

Ratings	Rated current	2.5A	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35°C
	Rated voltage	12V AC, DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Insulation resistance	100MΩ Min.	Test voltage : 500V D.C.
2. Withstanding voltage	No flashover or dielectric breakdown	AC 1,000V for 1minute
3. Insertion force	6Kgf Max.	FFC shall be insert at a speed of 25mm/min and measured the insertion force.
4. Short-circuit test	Temperature : 80°C contact force : initial pressure Min. 70 %	Connect the two adjacent terminals Times : 1sec, 5sec, 10sec, 50sec, 100sec Temperature : 80°C
5. Vibration	No microcracks Terminal surface SEM Micro-break detection ΔRc : Max 5mΩ (Voltage Drop Initial - Change after Test)	After leaving at 125°C for 48hr Temperature cyle : -40~90°C, 16h 2cycle RMS 5.1g, 100mA 
6. Water proofness	Leak Current Voltage withstand Insulation resistance Air tightness	Temperature : 23°C±5°C at 30min Test voltage : 100V D.C. at 1min

Materials / Finish

Part	Materials	Finish	UL Regulation
Base Insulation	PA66	Black Color	UL94V-0
Contact Terminal	Brass	Sn over Nickel	-

Camera Module Connector VC1

Mobile Connector

IM300-L04T-N339

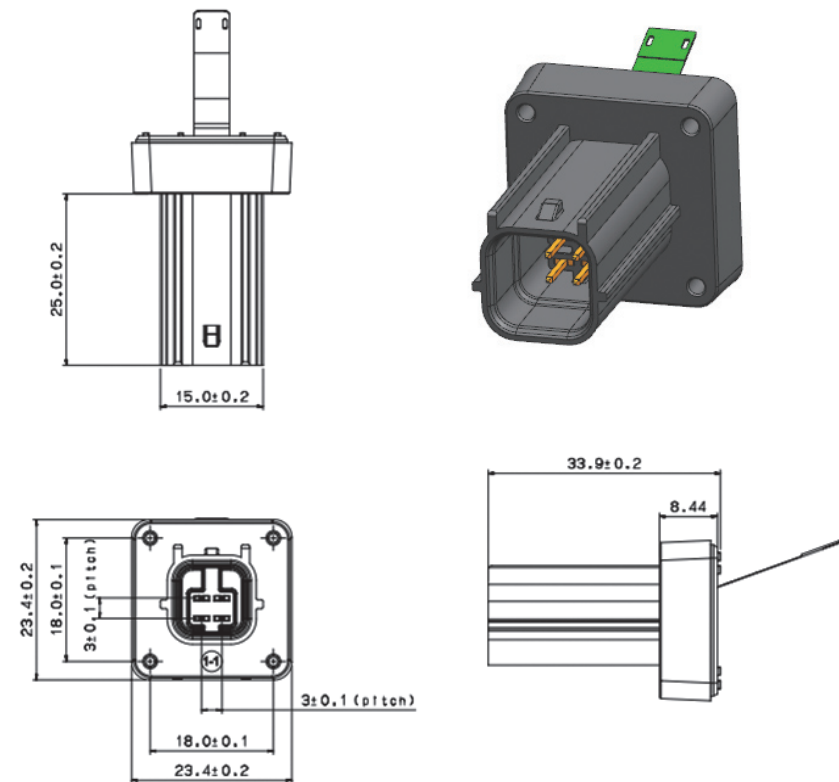
Product Number Structure

I M 300 - L 04 T - N 339

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Type of connectors : IN-OUTPUT	② Style : Male
③ Contact Pitch : 3.0mm	④ Type : Locking
⑤ No. of position : 4P	⑥ Test of on board : Through hole
⑦ Shape symbol : With Fitting	⑧ Connector Height : 33.9mm

Product Drawing

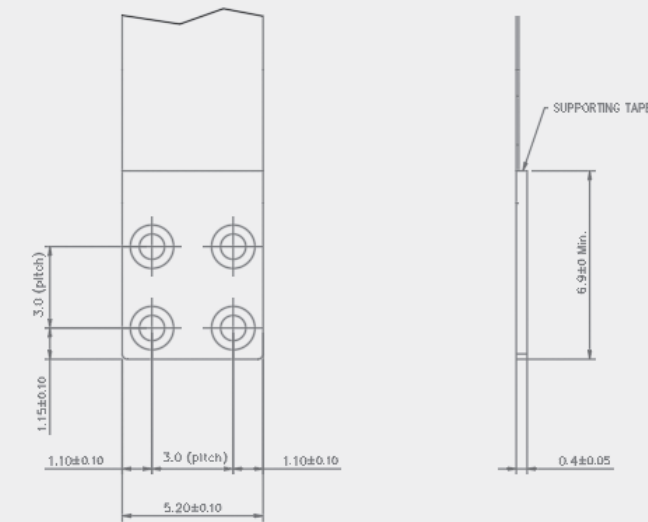


Camera Module Connector VC1

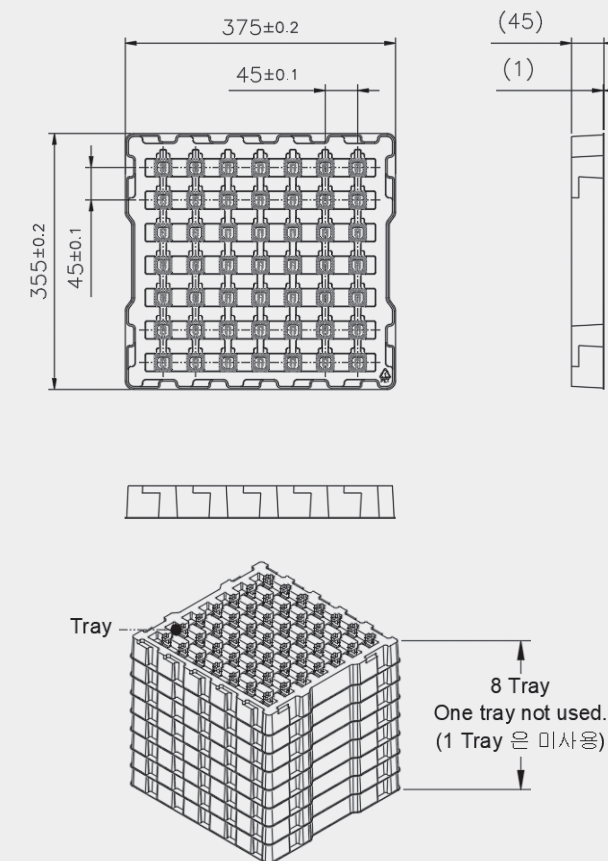
Mobile Connector

IM300-L04T-N339

Recommended FPC Dimensions



Packing Drawing



Note 1 : Stack the 8 trays (1Box = 343ea)

Note 2 : One tray not used

Board To Board Connector **BT**

Mobile Connector

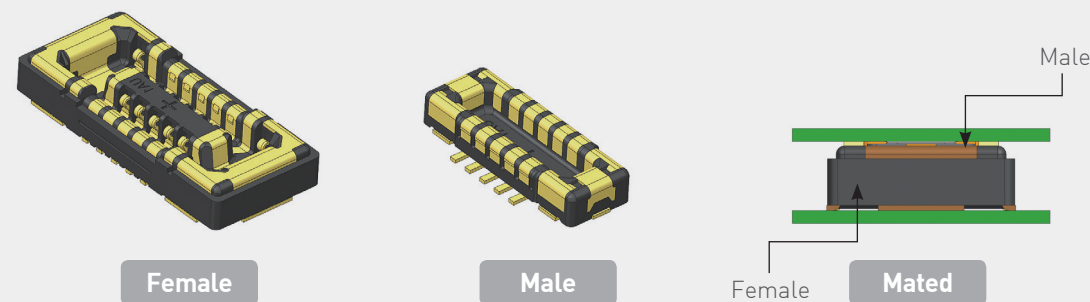
Female : BF035-I**B-C08-H **Male** : BM035-I**B-C08-H

Applications

- ▶ Smart Phone
- ▶ Smart Watch
- ▶ Tablet PC

Characteristics

- ▶ Full-Insert Structure
- ▶ Compact design and Smaller size



- ▶ For contact stability, Double Contact and Bellows Type Contact Structure
- ▶ 0.35mm pitch, 0.8mm slim stacking design for saving space
- ▶ Functional Fitting Nail
 - 1) Robust type (Mold Prevention of damage)
 - 2) High Current
- ▶ Female , Male - Terminal / Fitting Nail Full-Insert Structure
 - 1) Prevention of Base damage and Reinforcement of strength
 - 2) Improving product quality reliability.

Specifications

Current Rating	Contact Resistance	Dielectric Strength	Temperature Range
Signal 0.3A/Pin Power 5.0A/Pin	Signal 50mΩ [Max.] Power 10mΩ [Max.]	500V AC (RMS)	-35°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	Product No.
10	0.35	2.20	0.80	4.85	Female : BF035-I**B-C08-H Male : BM035-I**B-C08-H

Board To Board Connector **BT**

Mobile Connector

Female : BF035-I**B-C08-H **Male** : BM035-I**B-C08-H

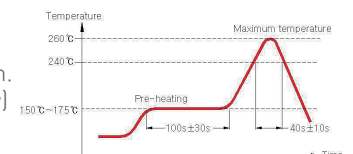
Product Specification

Ratings	Rated current	Signal : 0.3A/Pin Power : 5.0A/Pin	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35°C
	Rated voltage	30V AC(RMS) or DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	- Signal : 50mΩ [Max.] - Power : 30mΩ [Max.]	- Open circuit voltage: 20mV [AC] - Test current: 1mA.
2. Insulation resistance	50MΩ [Min.]	500V DC
3. Withstanding voltage	No flashover or dielectric breakdown	500V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 5.0kgf [Max.] 2) Separation force : 0.012kgf/Pin [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	1) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	- Vibration frequency range : 10-55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.]	- Acceleration : 50G (490m/s ²) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance - Signal : 90mΩ [Max.] - Power : 50mΩ [Max.] 2) Insulation resistance : 25MΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Phosphor Bronze	Au, Ni plated	-
Female Fitting Nail	Copper Alloy	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Phosphor Bronze	Au, Ni plated	-
Male Fitting Nail	Copper Alloy	Au, Ni plated	-

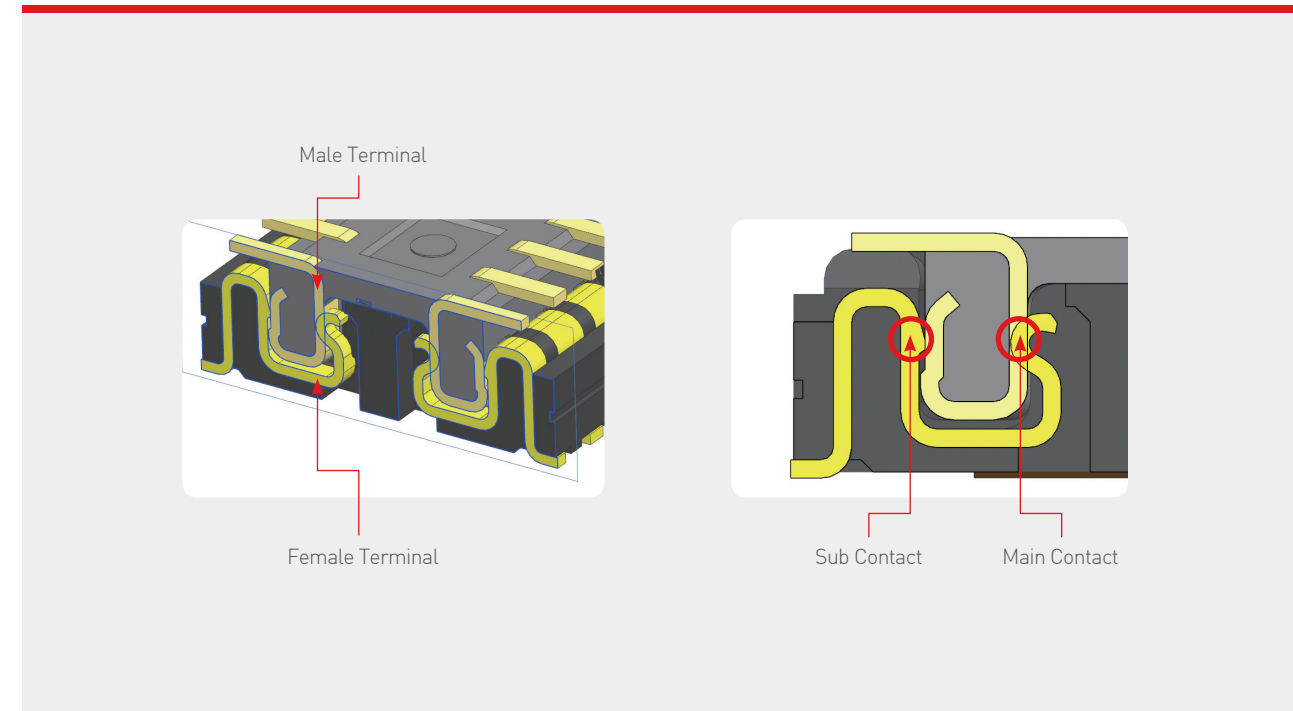
Board To Board Connector **BT**

Mobile Connector

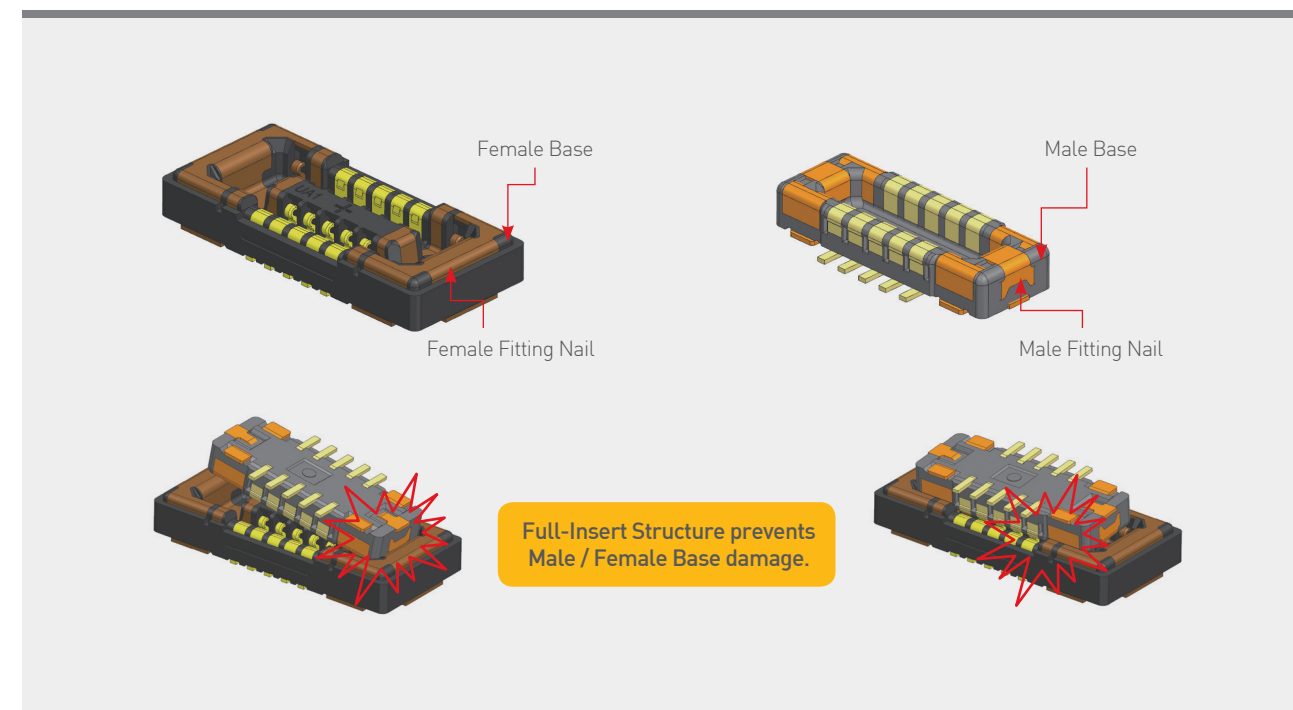
Female : BF035-I**B-C08-H Male : BM035-I**B-C08-H

FEATURES AND ADVANTAGES

► Double Contact point for stable contact preservation



► Full-Insert Structure for prevention of Base damage



Board To Board Connector **BT**

Mobile Connector

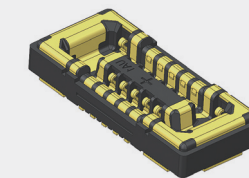
Female : BF035-I**B-C08-H Male : BM035-I**B-C08-H

Product Number Structure

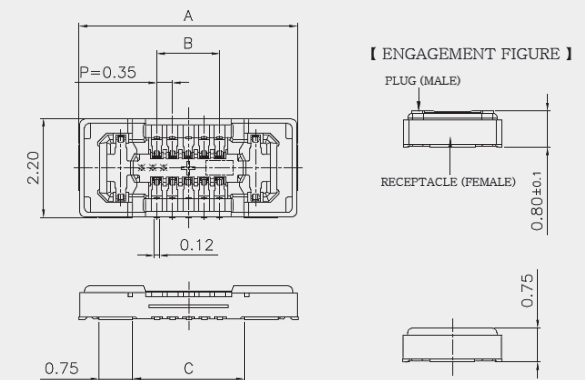
B F 035 - I 10 B - C 08 - H
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Female (Receptacle)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 10P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm
- ⑨ Option

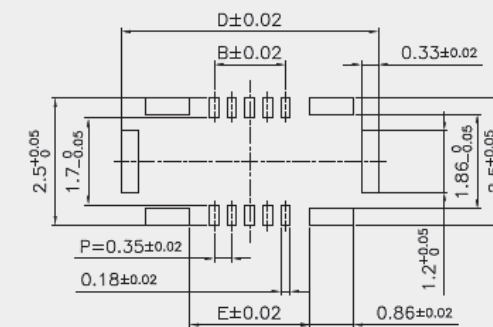
Product Drawing



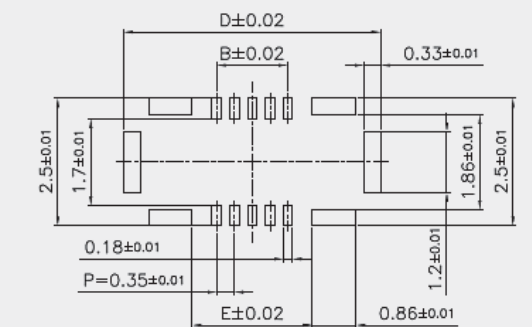
Female (Receptacle)



Recommended PCB , Metal Mask Layout



RECOMMENDED PAD LAYOUT



RECOMMENDED METAL MASK DIMENSION

(Metal Mask Thickness 80μm)

Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
BF035-I10B-C08-H	10	4.85	1.40	2.47	5.05	2.36

Note 1 : Please place orders in full reel quantities. (1Reel = 10,000ea)

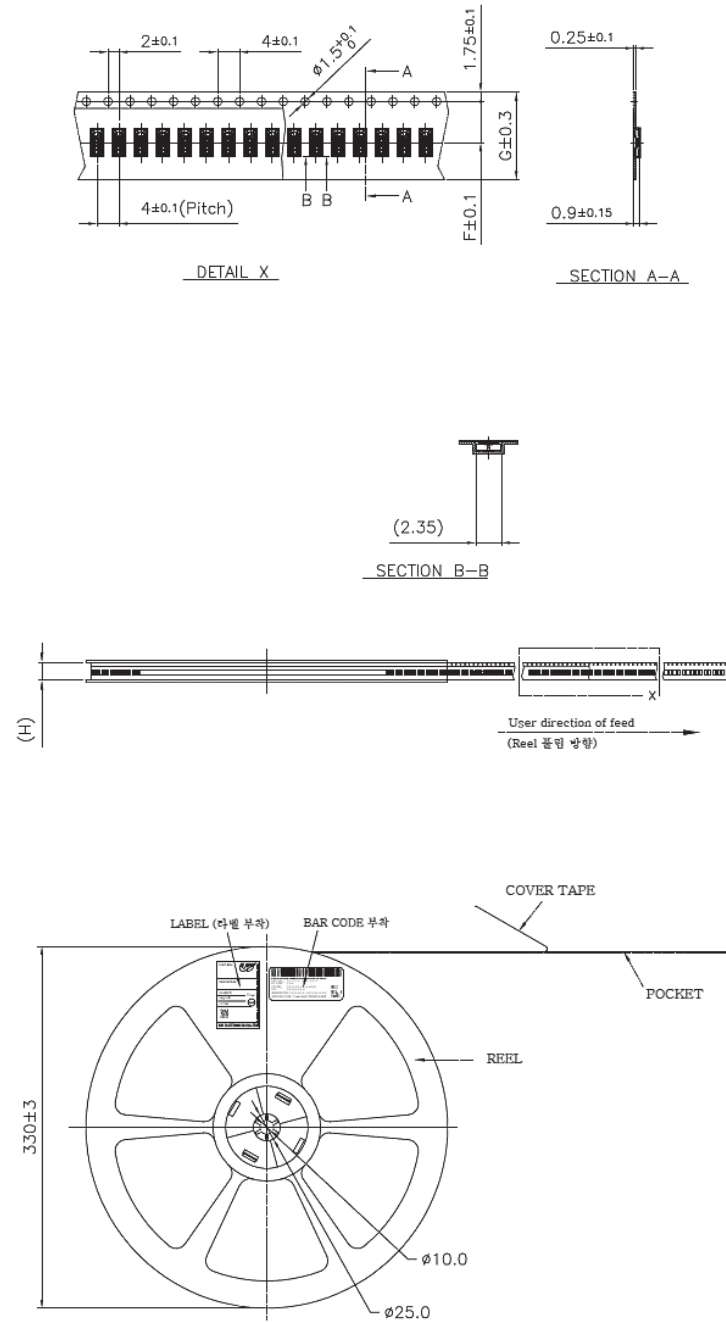
Note 2 : This connector has no polarity.

Board To Board Connector **BT**

Mobile Connector

Female : BF035-I**B-C08-H Male : BM035-I**B-C08-H

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	F	G	H
BF035-I10B-C08-H	10	7.50	16.00	17.50

Note 1 : Please place orders in full reel quantities. (1Reel = 10,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **BT**

Mobile Connector

Female : BF035-I**B-C08-H Male : BM035-I**B-C08-H

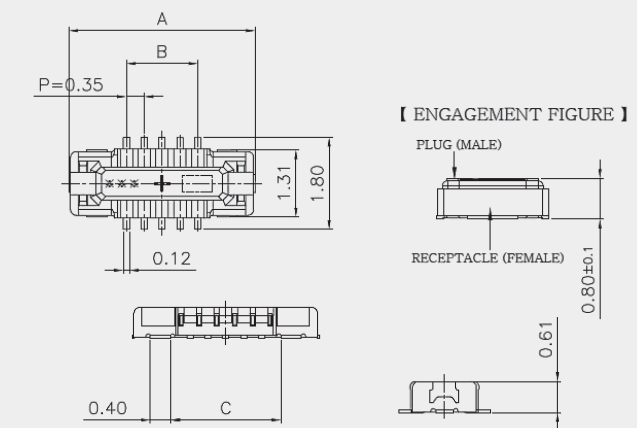
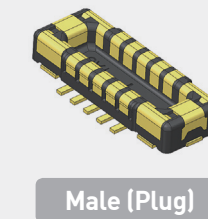
Product Number Structure

BM 035 - I 10 B - C 08 - H

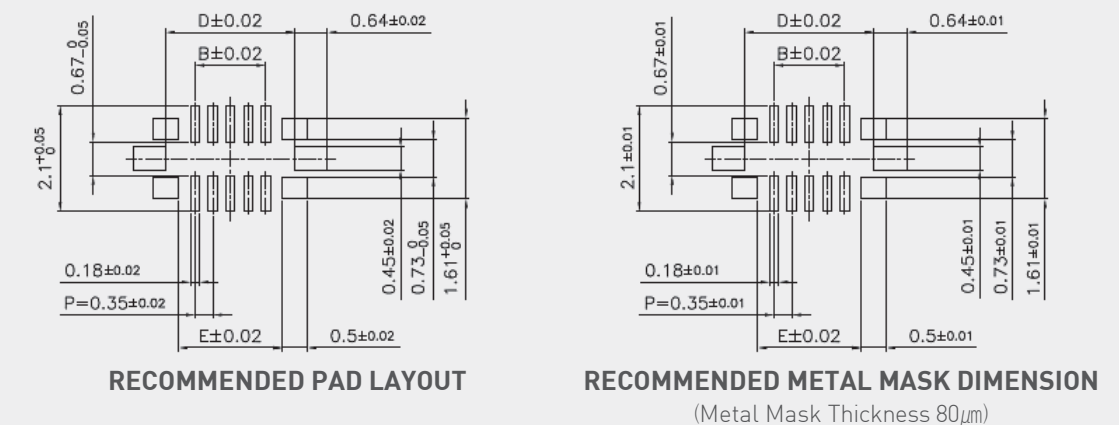
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Male (Plug)
- ③ Contact Pitch : 0.35mm
- ④ Type : Insert
- ⑤ No. of position : 10P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm
- ⑨ Option

Product Drawing



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
BM035-I10B-C08-H	10	3.65	1.40	2.15	2.57	2.05

Note 1 : Please place orders in full reel quantities. (1Reel = 10,000ea)

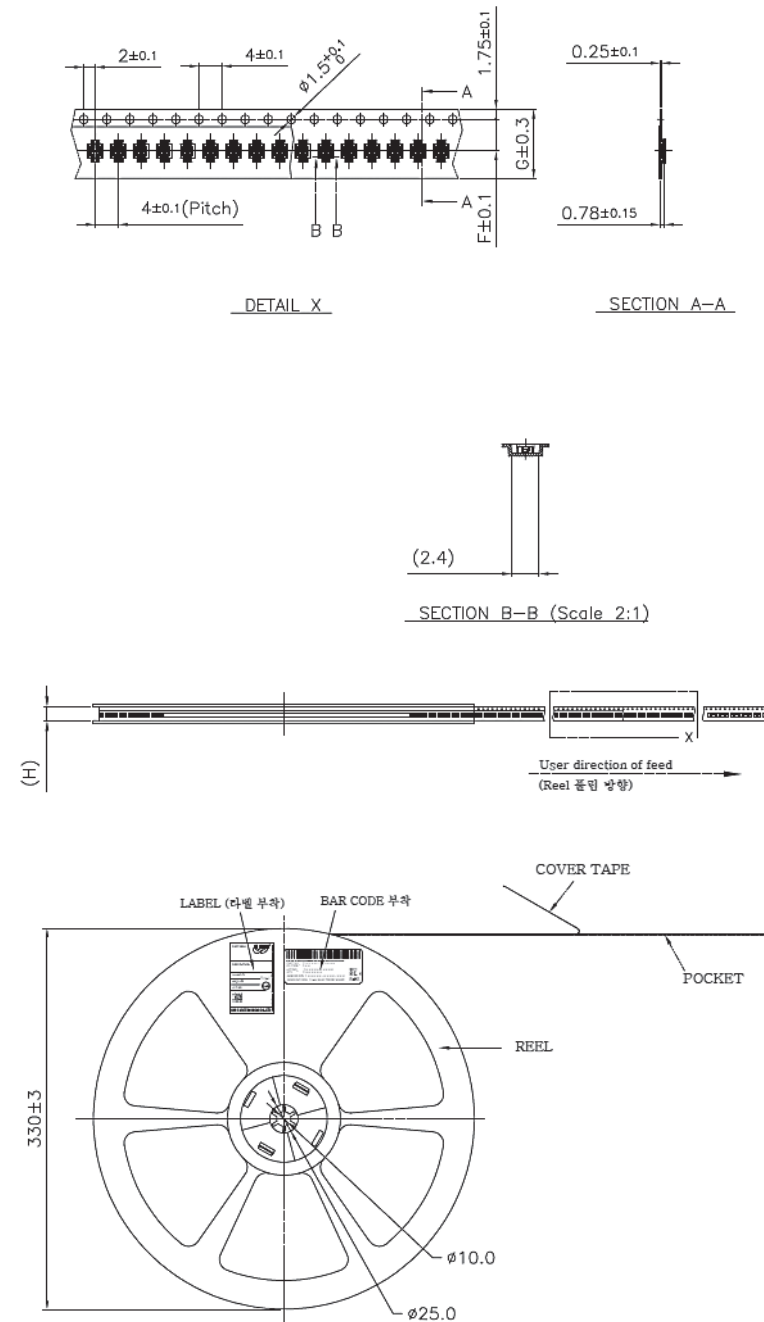
Note 2 : This connector has no polarity.

Board To Board Connector **BT**

Mobile Connector

Female : BF035-I**B-C08-H Male : BM035-I**B-C08-H

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	F	G	H
BM035-110B-C08-H	10	5.50	12.00	13.50

Note 1 : Please place orders in full reel quantities. (1Reel = 10,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **PA**

Mobile Connector

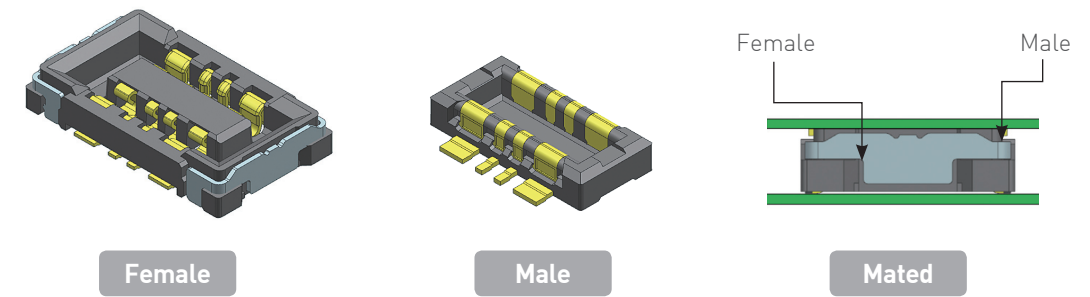
Female : BF240-I08B-C08 Male : BM240-I08B-C08

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ High currents rating
- ▶ Compact design and Smaller size



- ▶ For contact stability, Double Contact and Bellows Type Contact Structure
- ▶ High current(3A) for Power Contact
- ▶ 0.75mm slim stacking design for saving space
- ▶ APPLICATION : Battery section of miniature mobile devices
- ▶ Male Full-Insert Structure

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
Signal 0.3A/Pin Power 3.0A/Pin	Signal 50mΩ [Max.] Power 10mΩ [Max.]	250V AC(RMS)	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
8	1.60	2.50	0.75	4.2	Male : BM240-I08B-C08 Female : BF240-I08B-C08

Board To Board Connector PA

Mobile Connector

Female : BF240-I08B-C08 Male : BM240-I08B-C08

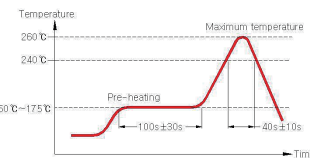
Product Specification

Ratings	Rated current	Signal : 0.3A/Pin Power : 3.0A/Pin	Operating temperature range	-35°C to +85°C	Storage temperature range	+15°C to +35°C
	Rated voltage	30V AC(RMS) or DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	- Signal : 50mΩ [Max.] - Power : 10mΩ [Max.]	- Open circuit voltage: 20mV [AC] - Test current: 1mA.
2. Insulation resistance	100MΩ [Min.]	250V DC
3. Withstanding voltage	No flashover or dielectric breakdown	250V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 3.57kgf [Max.] 2) Separation force : 0.51kgf [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	Contact Resistance - Signal : 70mΩ [Max] - Power : 20mΩ [Max]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact Resistance - Signal : 70mΩ [Max] - Power : 20mΩ [Max]	- Vibration frequency range : 10-55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
7. Shock	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact Resistance - Signal : 70mΩ [Max] - Power : 20mΩ [Max]	- Acceleration : 50G (490m/s ²) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance - Signal : 70mΩ [Max.] - Power : 20mΩ [Max.] 2) Insulation resistance : 50MΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr

9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)
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Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Terminal	Copper Alloy	Au plated	-
Female Fitting Nail	Phosphor Bronze	Au plated	-
Male Base	LCP	Black	UL94V-0
Male Terminal	Copper Alloy	Au plated	-

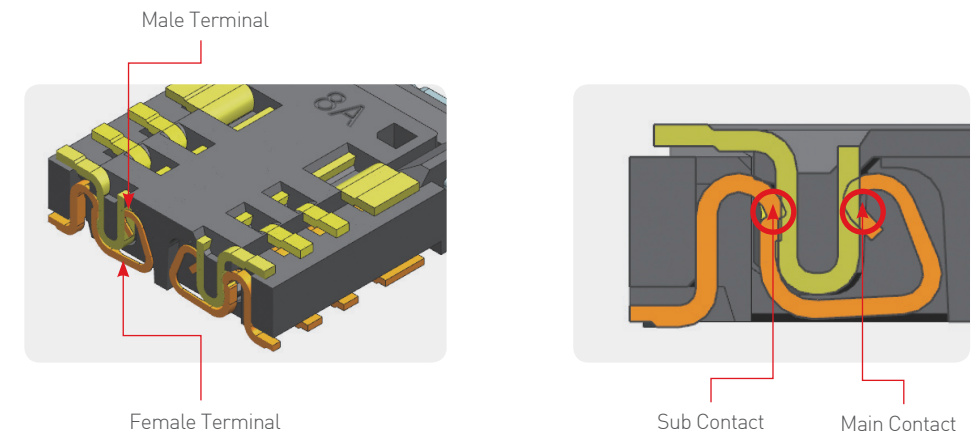
Board To Board Connector PA

Mobile Connector

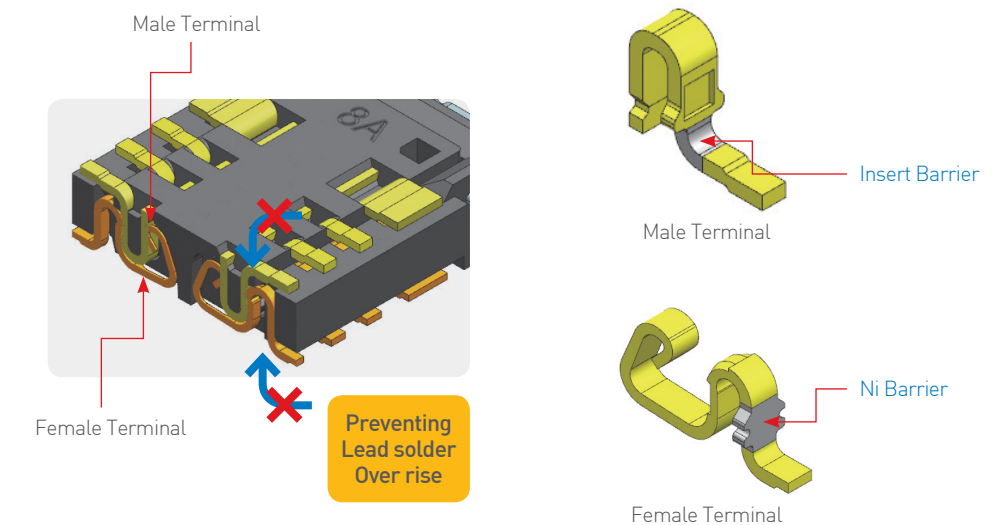
Female : BF240-I08B-C08 Male : BM240-I08B-C08

FEATURES AND ADVANTAGES

- Double Contact point for stable contact preservation



- Insert or Ni Barrier for preventing Lead solder over rise



Board To Board Connector PA

Mobile Connector

Female : BF240-I08B-C08 Male : BM240-I08B-C08

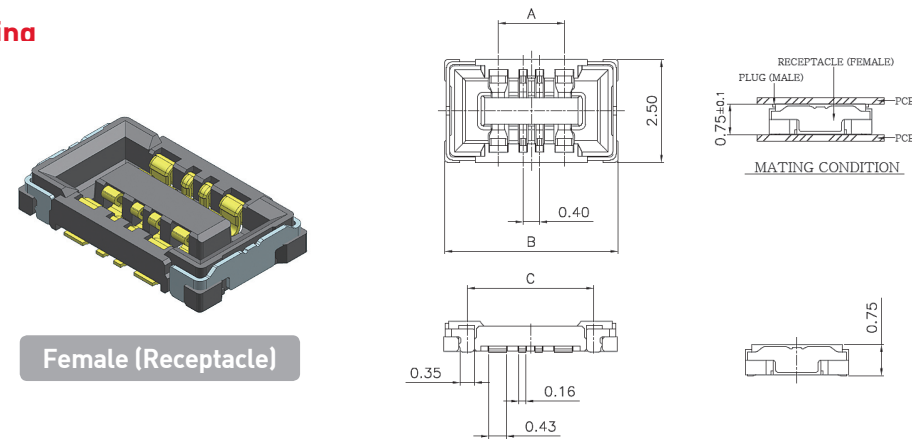
Product Number Structure

B **F** **240** - **I** **08** **B** - **C** **08**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

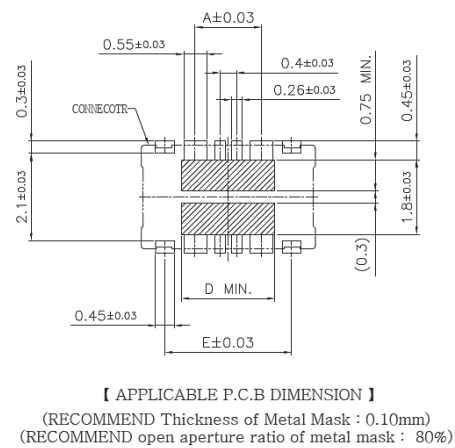
- ① Type of connectors : Board to Board
- ② Style : Female (Receptacle)
- ③ Contact Pitch : 2.4mm
- ④ Type : Insert
- ⑤ No. of position : 8P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.75mm

Product Drawing



Female (Receptacle)

Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
BF024-I08B-C08	Signal 4, Power 4	1.60	4.20	3.06	2.25	3.06

Note 1 : Please place orders in full reel quantities. (1Reel = 7,000ea)

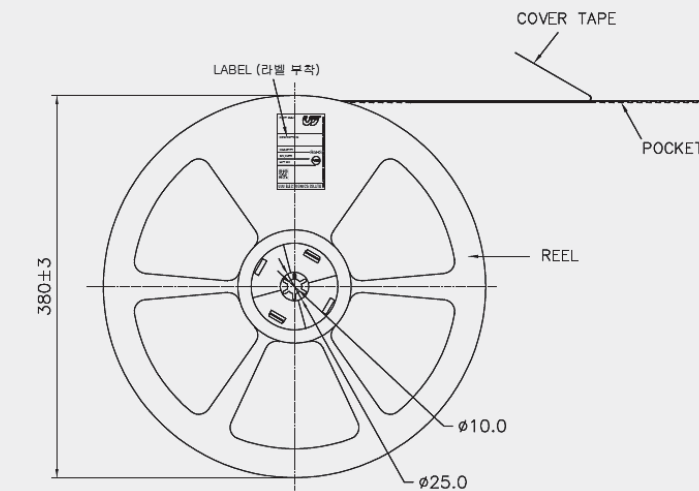
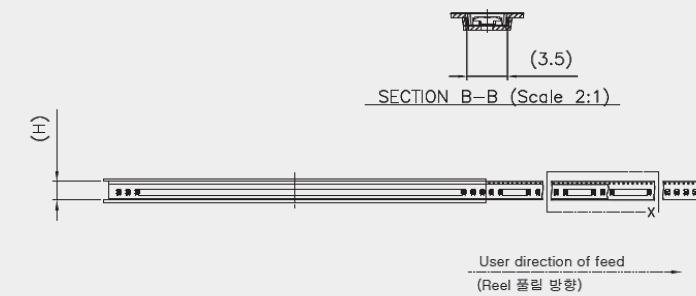
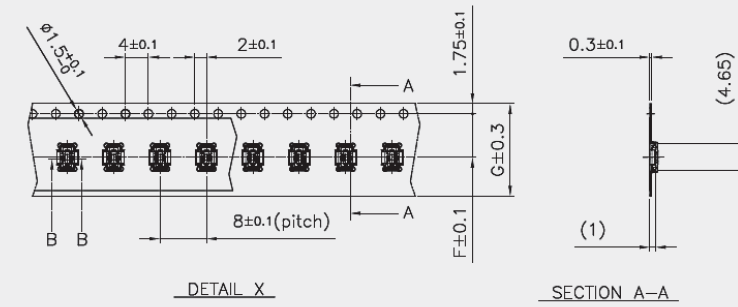
Note 2 : This connector has no polarity.

Board To Board Connector PA

Mobile Connector

Female : BF240-I08B-C08 Male : BM240-I08B-C08

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	F	G	H
BF024-I08B-C08	Signal 4, Power 4	7.5	16.0	17.4

Note 1 : Please place orders in full reel quantities. (1Reel = 7,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector PA

Mobile Connector

Female : BF240-I08B-C08 Male : BM240-I08B-C08

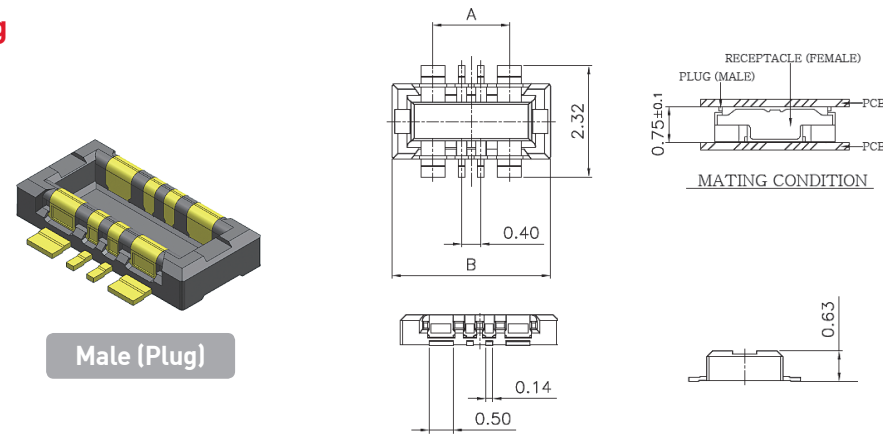
Product Number Structure

B **M** **240** - **I** **08** **B** - **C** **08**

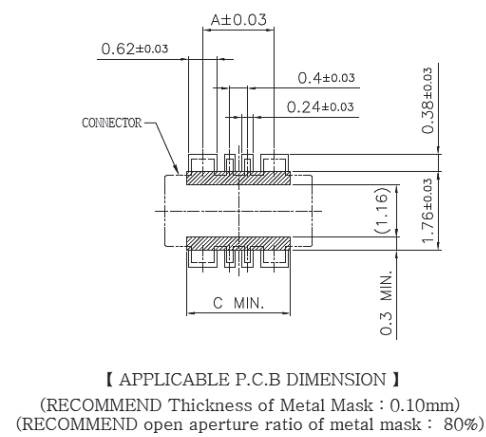
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : Board to Board
- ② Style : Plug (Male)
- ③ Contact Pitch : 2.4mm
- ④ Type : Insert
- ⑤ No. of position : 8P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting
- ⑧ Connector Height : 0.75mm

Product Drawing



Recommended PCB, Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C
BM024-I08B-C08	Signal 4, Power 4	1.60	3.30	2.32

Note 1 : Please place orders in full reel quantities. (1Reel = 7,000ea)

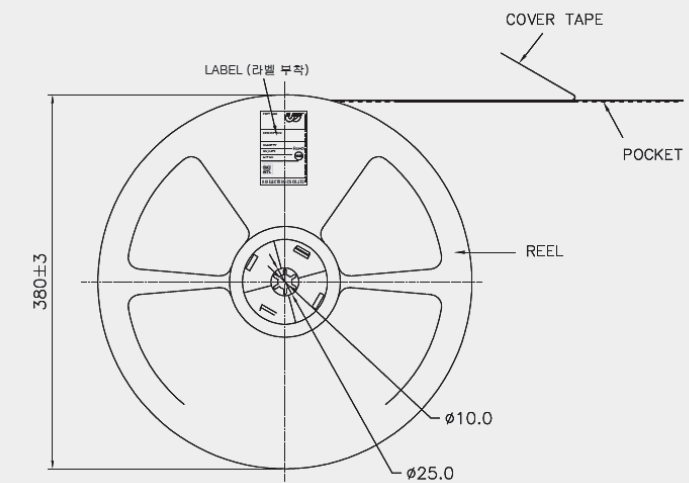
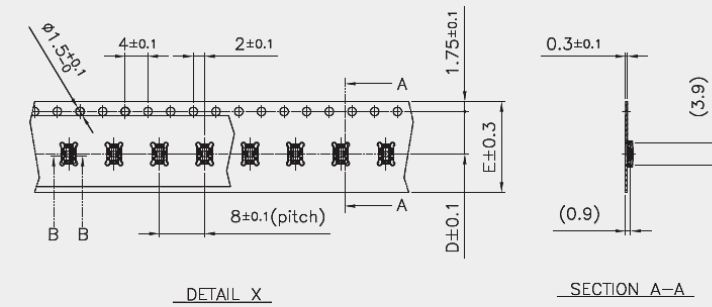
Note 2 : This connector has no polarity.

Board To Board Connector PA

Mobile Connector

Female : BF240-I08B-C08 Male : BM240-I08B-C08

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	D	E	F
BM024-I08B-C08	Signal 4, Power 4	7.5	16.0	17.4

Note 1 : Please place orders in full reel quantities. (1Reel = 7,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector PK

Mobile Connector

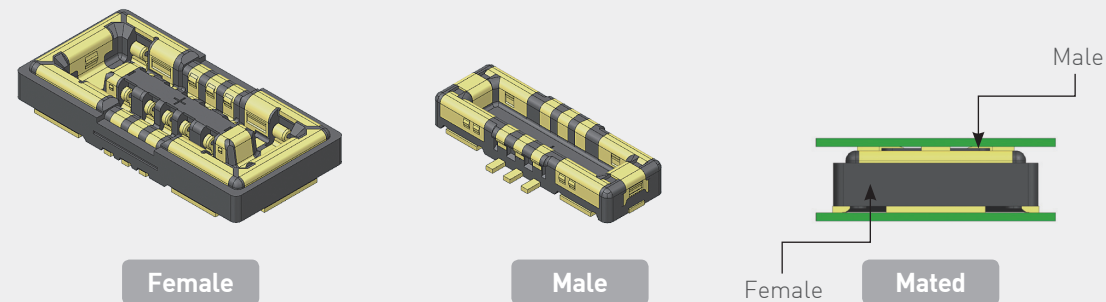
Female : BF240-I06B-C08-A **Male** : BM240-I06B-C08-A

Applications

- ▶ Smart Phone
- ▶ Smart Watch
- ▶ Tablet PC

Characteristics

- ▶ Full-Insert Structure
- ▶ Compact design and Smaller size
- ▶ Capable of high current power supply



- ▶ For contact stability, Double Contact and Bellows Type Contact Structure
- ▶ 0.4mm signal pitch, 0.8mm slim stacking design for saving space
- ▶ Functional Fitting Nail
 - 1) Robust type (Mold Prevention of damage)
 - 2) High Current Max. 10A
- ▶ Female , Male – Terminal / Fitting Nail Full-Insert Structure
 - 1) Prevention of Base damage and Reinforcement of strength
 - 2) Improving product quality reliability.

Specifications

Current Rating	Contact Resistance	Dielectric Strength	Temperature Range
Signal 0.3A/Pin Power 10A	Signal 30mΩ [Max.]	500V AC (RMS)	-35°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	Product No.
Signal 6 Power 2	0.4(Signal)	2.50	0.80	5.06	Female : BF240-I06B-C08-A Male : BM240-I06B-C08-A

Board To Board Connector PK

Mobile Connector

Female : BF240-I06B-C08-A **Male** : BM240-I06B-C08-A

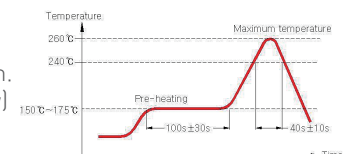
Product Specification

Ratings	Rated current	Signal : 0.3A/Pin Power : 10A/Pin	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35°C
	Rated voltage	30V AC(RMS) or DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	- Signal : 30mΩ [Max.] - Power : 15mΩ [Max.]	- Open circuit voltage: 20mV [AC] - Test current: 1mA.
2. Insulation resistance	50MΩ [Min.]	500V DC
3. Withstanding voltage	No flashover or dielectric breakdown	500V AC(RMS) for 1minute
4. Insertion force / Separation force	1) Insertion force : 4.082kgf [Max.] 2) Separation force : 1.02kgf [Min]	Insert and withdraw connectors at the speed rate of 25mm per minute.
5. Durability	Contact resistance - Signal : 30mΩ [Max.] - Power : 15mΩ [Max.]	When mated up to 30 cycles repeatedly by the rate of 10mm per minute
6. Vibration	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 30mΩ [Max.] - Power : 15mΩ [Max.]	- Frequency range : 10~55~10Hz/Min - Peak amplitude : 1.5mm - Test direction : 3 axial (X,Y,Z) - Duration : 2h each (6h in total)
7. Shock	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Signal : 30mΩ [Max.] - Power : 15mΩ [Max.]	- Acceleration : 50G (500m/s ²) - Duration : 11ms - Number of shocks : 3 times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance - Signal : 30mΩ [Max.] - Power : 15mΩ [Max.] 2) Insulation resistance : 25MΩ [Min.]	- Temperature : 40°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Female Base	LCP	Black	UL94V-0
Female Signal Contact	Phosphor Bronze	Au, Ni plated	-
Female Power Contact	Copper Alloy	Au, Ni plated	-
Male Base	LCP	Black	UL94V-0
Male Signal Contact	Phosphor Bronze	Au, Ni plated	-
Male Power Contact	Copper Alloy	Au, Ni plated	-

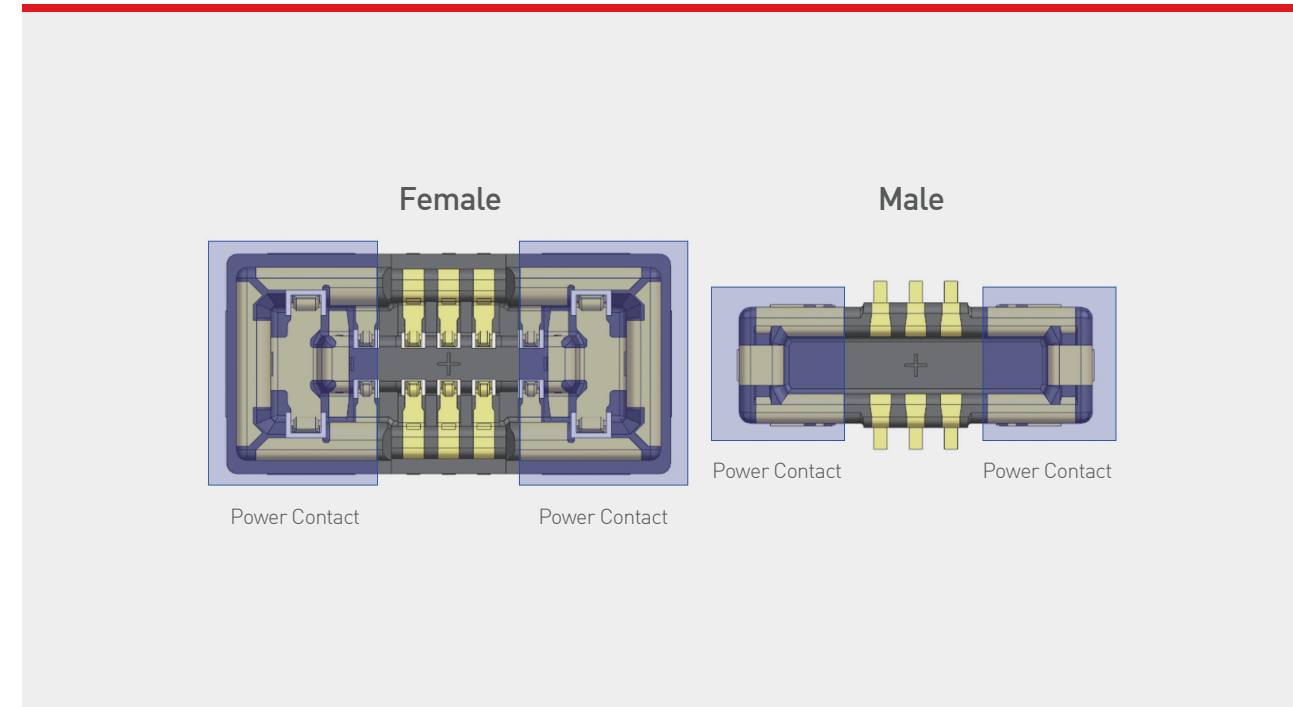
Board To Board Connector **PK**

Mobile Connector

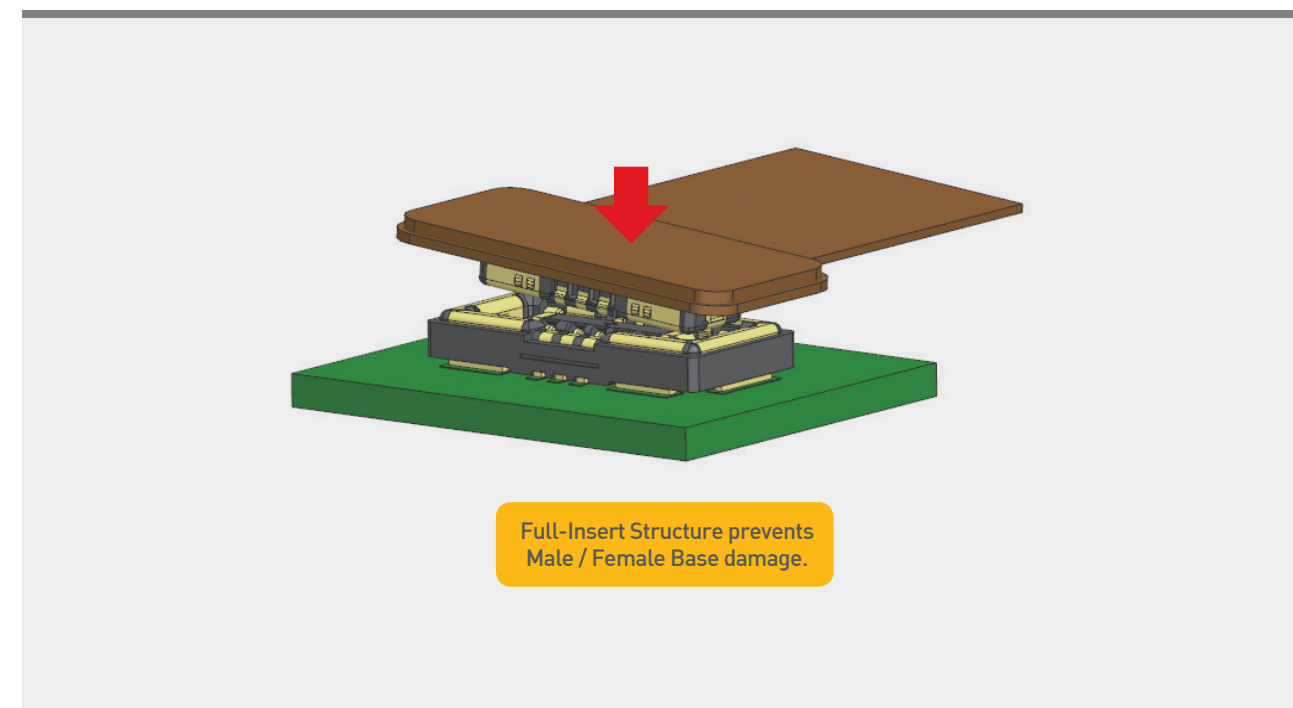
Female : BF240-I06B-C08-A Male : BM240-I06B-C08-A

FEATURES AND ADVANTAGES

- ▶ Capable of High Current (Power Contact : 10A Max.)
- ※ Signal Contact : 0.3A Max.



▶ Full-Insert Structure for prevention of Base damage



Board To Board Connector **PK**

Mobile Connector

Female : BF240-I06B-C08-A Male : BM240-I06B-C08-A

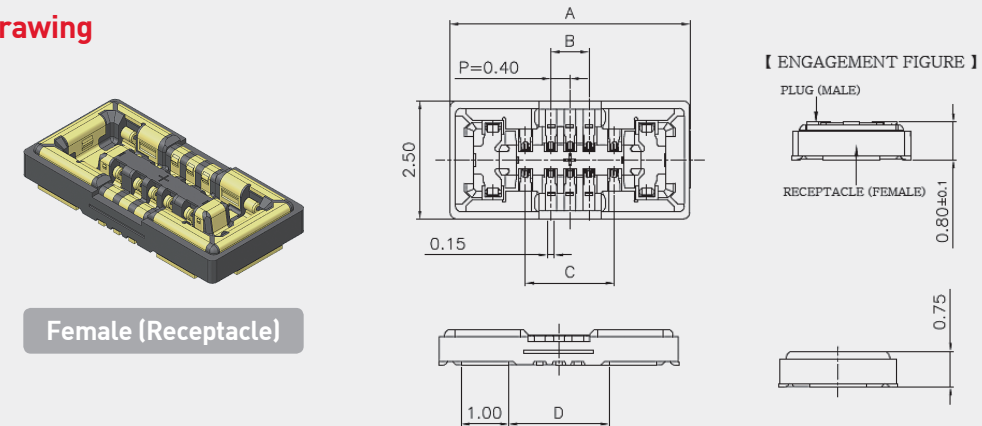
Product Number Structure

B F 240 - I 10 B - C 08 - A

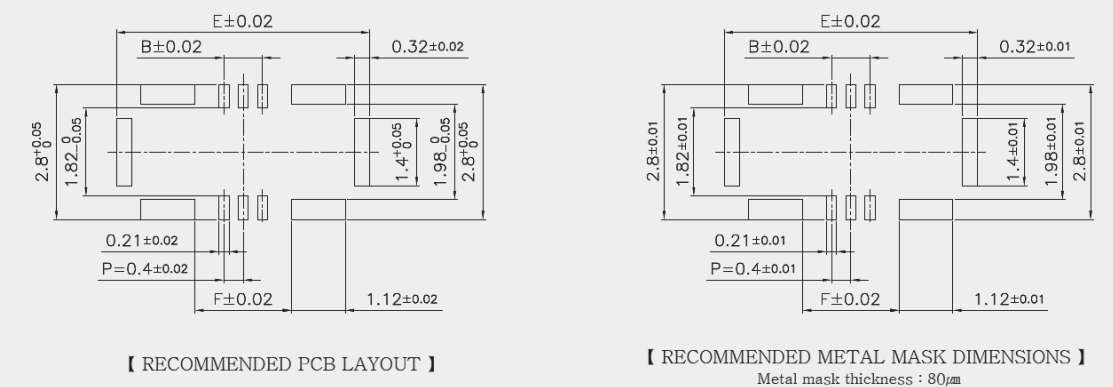
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Female (Receptacle)
- ③ Contact Pitch : 2.4mm
- ④ Type : Insert
- ⑤ No. of position : 6P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm
- ⑨ Option

Product Drawing



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E	F
BF240-I06B-C08-A	Signal 6, Power 2	5.06	0.80	1.87	2.12	5.26	2.00

Note 1 : Please place orders in full reel quantities. (1Reel = 20,000ea)

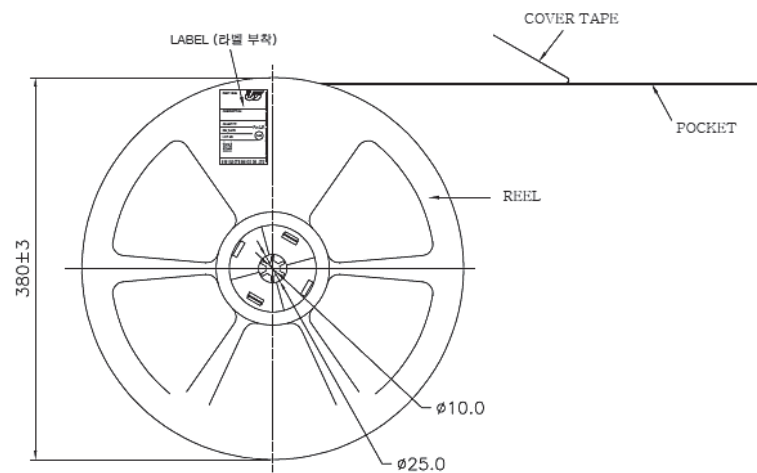
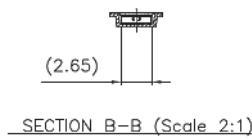
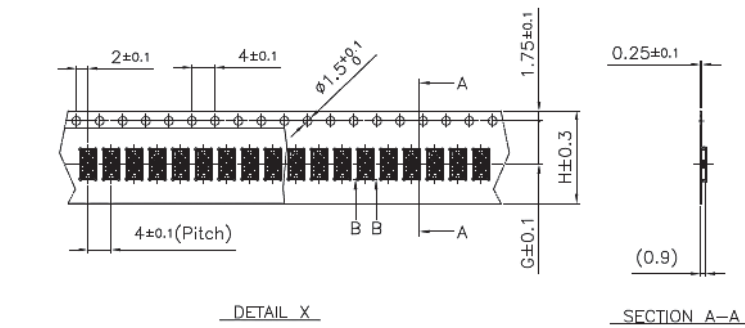
Note 2 : This connector has no polarity.

Board To Board Connector **PK**

Mobile Connector

Female : BF240-I06B-C08-A Male : BM240-I06B-C08-A

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	G	H	J
BF240-I06B-C08-A	Signal 6, Power 2	7.5	16.0	17.5

Note 1 : Please place orders in full reel quantities. (1Reel = 20,000ea)

Note 2 : This connector has no polarity.

Board To Board Connector **PK**

Mobile Connector

Female : BF240-I06B-C08-A Male : BM240-I06B-C08-A

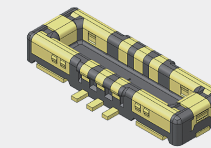
Product Number Structure

BM 035 - I 10 B - C 08 - H

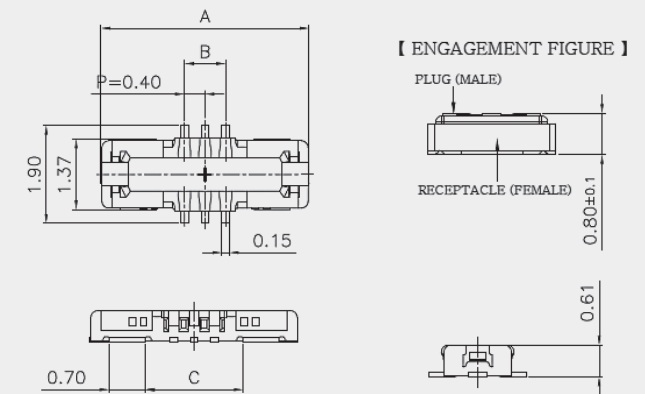
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : Board to Board
- ② Style : Male (Plug)
- ③ Contact Pitch : 2.4mm
- ④ Type : Insert
- ⑤ No. of position : 10P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.8mm
- ⑨ Option

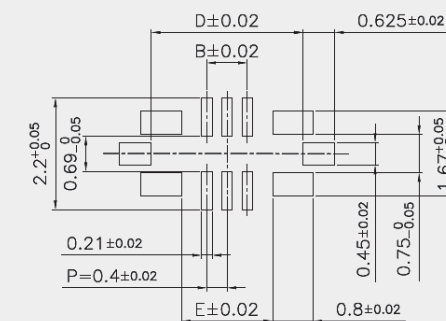
Product Drawing



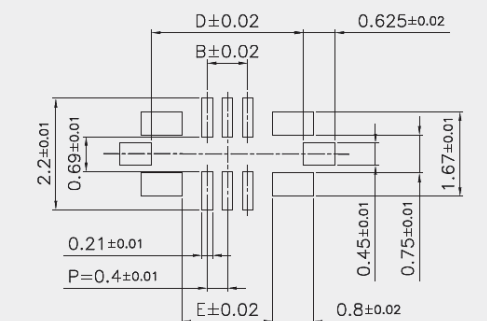
Male (Plug)



Recommended PCB , Metal Mask Layout



【 RECOMMENDED PCB LAYOUT 】



【 RECOMMENDED METAL MASK DIMENSIONS 】
Metal mask thickness : 80μm

Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
BM240-I06B-C08-A	Signal 6, Power 2	4.05	0.80	1.90	3.00	1.80

Note 1 : Please place orders in full reel quantities. (1Reel = 20,000ea)

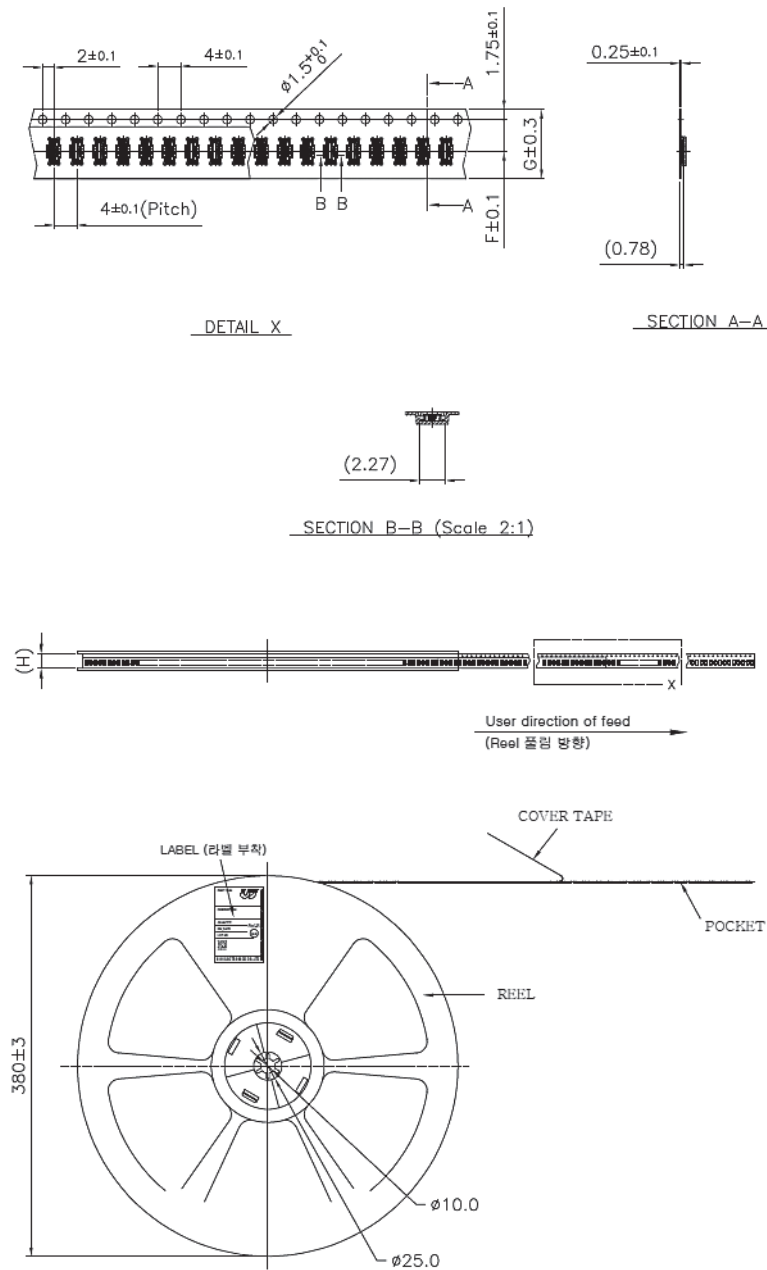
Note 2 : This connector has no polarity.

Board To Board Connector **PK**

Mobile Connector

Female : BF240-I06B-C08-A Male : BM240-I06B-C08-A

Embossed Tape Dimensions



Unit : mm

Product Code	No. of Contacts	F	G	H
BM240-I06B-C08-A	Signal 6, Power 2	5.5	12.0	13.5

Note 1 : Please place orders in full reel quantities. (1Reel = 20,000ea)

Note 2 : This connector has no polarity.

FPC Connector

Mobile Connector

Road Map



Downsizing (Lower height, Narrower pitch) until 2014

Replaced with BtoB due to changes in assembly structure of Smartphone

FPC Connector

Mobile Connector

“**” : Available pins

Item	Pin	Pitch	Width	Height	Type	Code	Remark
	FF	7, 15, 17	0.25	3.15	0.5	B/F	PF025-B**B-N05
	NAMU	8, 12, 14, 35, 41, 70	0.25	3.80	0.66	B/F	PF025-B**B-N07
	2580S	80	0.25	4.00	0.95	B/F	PF025-B**B-N09
	KARA	21	0.3	3.50	1.0	F/F	PF030-O**B-C09-A
	0.3 F/F Series	13, 21, 31, 39, 61, 71	0.3	3.50	1.0	F/F	PF030-O**B-C09-A
	0.4 B/F Series	6	0.4	3.50	0.66	B/F	PF040-B**B-N07-A
	0.5 F/F Series	6	0.5	3.00	0.9	F/F	PF050-O**B-C09-A
	0.5 B/F Series	6, 8	0.5	3.70	0.9	B/F	PF050-B**B-C09-A
	FC	40	0.5	3.87	1.1	B/F	FF050-B**B-C11
	0.5 B/F Series	6, 8	0.5	3.70	0.9	B/F	PF050-B**B-C09-A
	FC	40	0.5	3.87	1.1	B/F	FF050-B**B-C11

FPC Connector

2580S

Mobile Connector

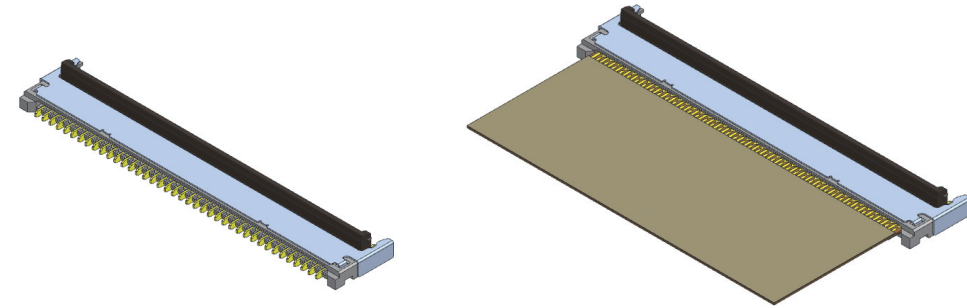
PF025-B80B-C11

Applications

- ▶ Smart Phone
- ▶ Smart Watch
- ▶ Tablet PC

Characteristics

- ▶ ZIF, Right Angle
- ▶ Back-Flip Lock mechanism
- ▶ Metal shell cover



- ▶ 0.25mm Pitch, 1.06mm Height, Low and upper both contact
- ▶ Easy to Insert FPC and operate Actuator Back-lock system
- ▶ Both upper and lower contacts design accepts any FPC insertion directions.
- ▶ Improved robustness by attaching a metal shell.

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
0.2A Max.	50mΩ [Max.]	200V AC[RMS]	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Lenght	Product No.
80	0.25	4.25	1.06	22.15	PF025-B80B-C11

FPC Connector 2580S

Mobile Connector

PF025-B80B-C11

Product Specification

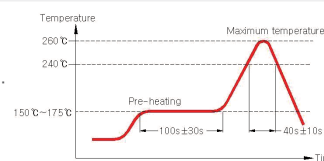
Ratings	Rated current	0.2A Max.	Operating temperature range	-35°C to +85°C 1	Storage temperature range	15°C ~ 35°C
	Rated voltage	50V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC Specification : T=0.14±0.02mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	50mΩ Max. / contact	Closed circuit Current : 0.5mA. Open circuit voltage : 20mV Max.
2. Insulation resistance	50MΩ Min. / contact	Test voltage : 250V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 200V for 1minute
4. Actuator operation forces	2.4kgf Max.	Push the Actuator Open/ Close direction at a speed of 25mm/min and measured Actuator operation force.
5. FPC retention force	1.2kgf Min.	Pull the FPC from a connector at a speed of 25mm/min and measured extraction force.
6. Durability	No damage or mechanical defect Contact resistance : 50mΩ Max. / contact	Number of cycles : 10 cycles.
7. Vibration	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out Contact resistance : 50mΩ Max. / contact	Amplitude: 1.5mm Acceleration: 15%g Frequency: 10~55Hz Duration : X,Y,Z axis each 30minutes..
8. Humidity	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact Insulation Resistance : 50MΩ Min.	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	PA	Black	UL94V-0
Actuator	PPS	Black	UL94V-0
Contact Terminal	Phosphor Bronze	Au over Nickel	-
Cover	Phosphor Bronze	Au over Nickel	-

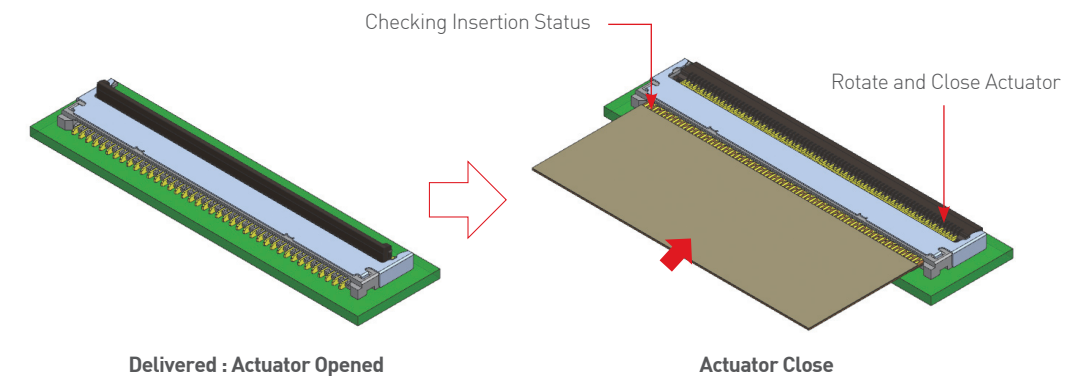
FPC Connector 2580S

Mobile Connector

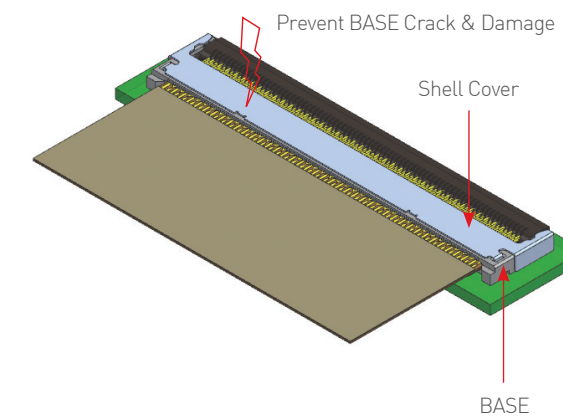
PF025-B80B-C11

FEATURES AND ADVANTAGES

- Easy to Insert FPC and operate Actuator close
Both Upper and Lower contact, Back Lock System



- Design to strengthen against damage
Reinforced Shell Cover Prevents the Base is Damaged



FPC Connector 2580S

Mobile Connector

PF025-B80B-C11

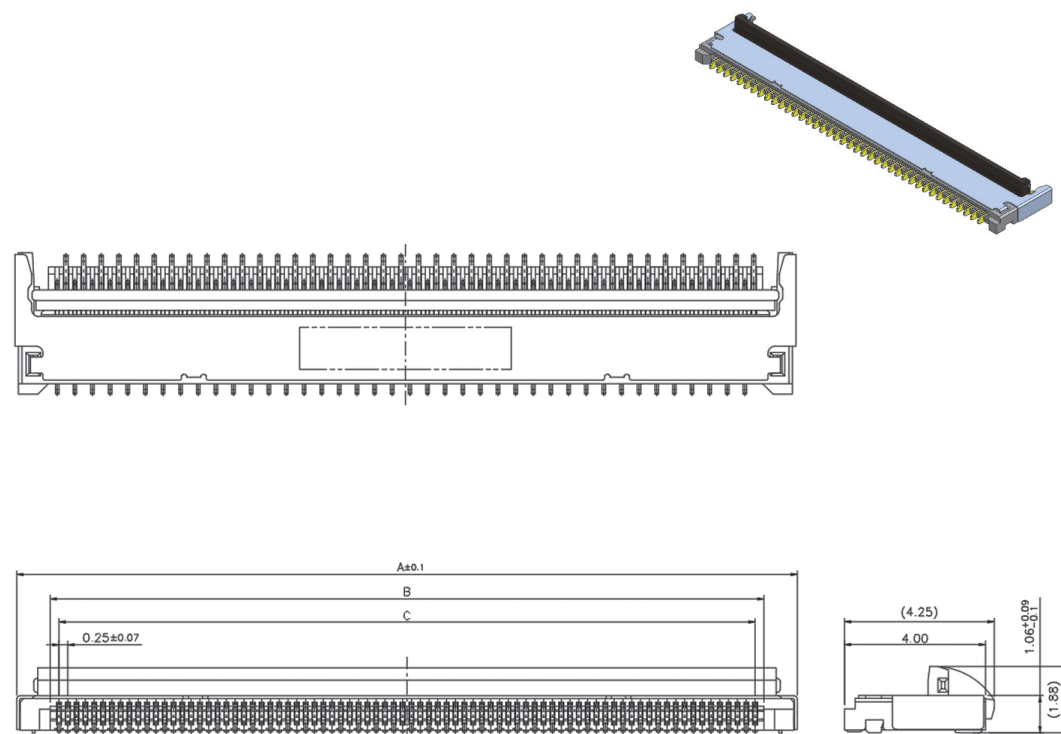
Product Number Structure

P **F** **025** - **B** **80** **B** - **C** **11**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : FPC
- ② Style : FLIP
- ③ Contact Pitch : 0.25mm
- ④ Type : Back Flip
- ⑤ No. of position : 80P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 1.06mm

Product Drawing



Unit : mm

Product No.	No. of Contacts	A	B	C
PF025-B80B-C11	80	22.15	20.25	19.75

Note 1 : Please place orders in full reel quantities. (1Reel = 3,000ea)

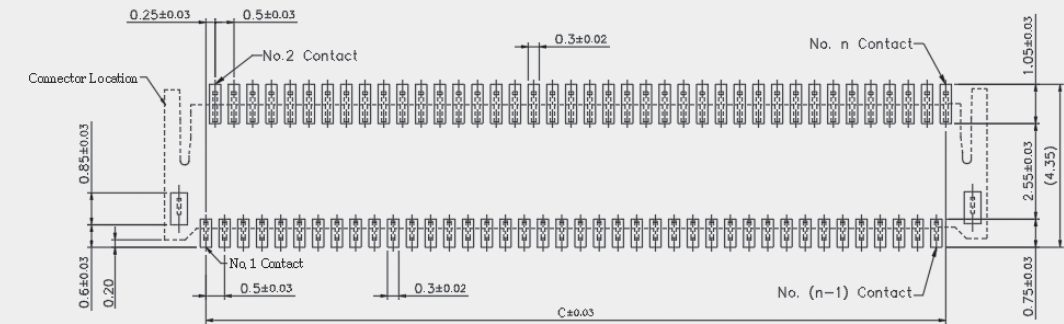
Note 2 : This connector has no polarity.

FPC Connector 2580S

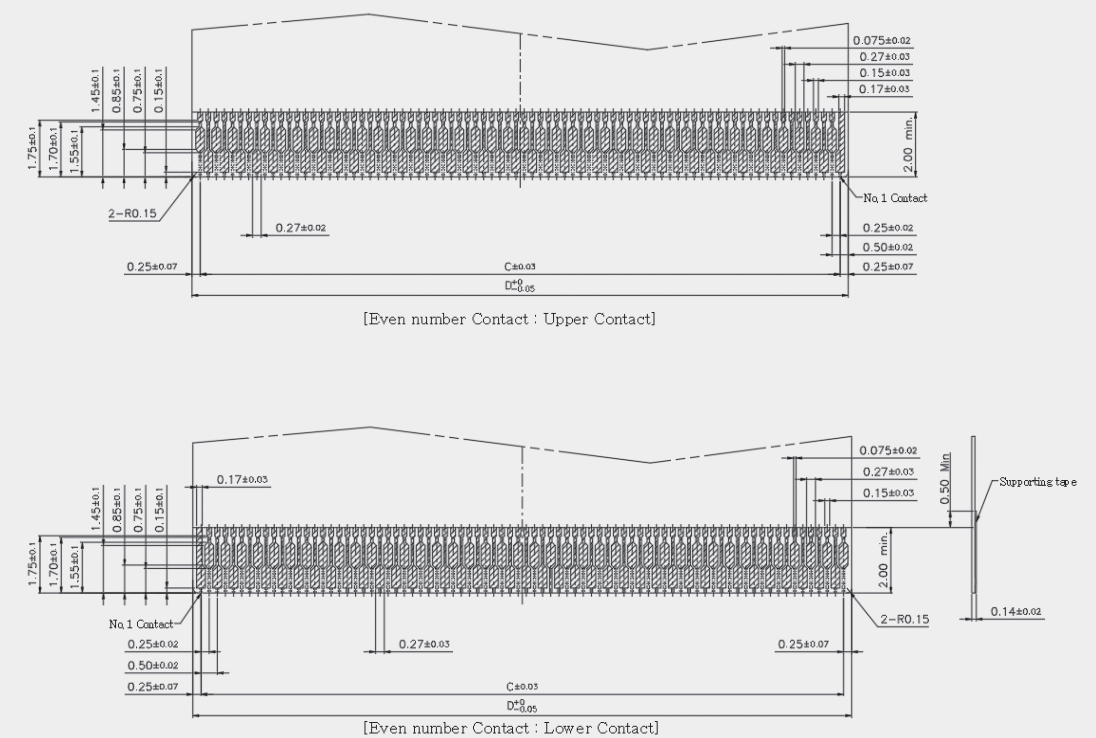
Mobile Connector

PF025-B80B-C11

Recommended PCB Layout, Metal Mask dimensions



Recommended PCB Layout, Metal Mask dimensions



Unit : mm

Product No.	No. of Contacts	C	D
PF025-B80B-C11	80	19.75	20.25

Note 1 : Please place orders in full reel quantities. (1Reel = 3,000ea)

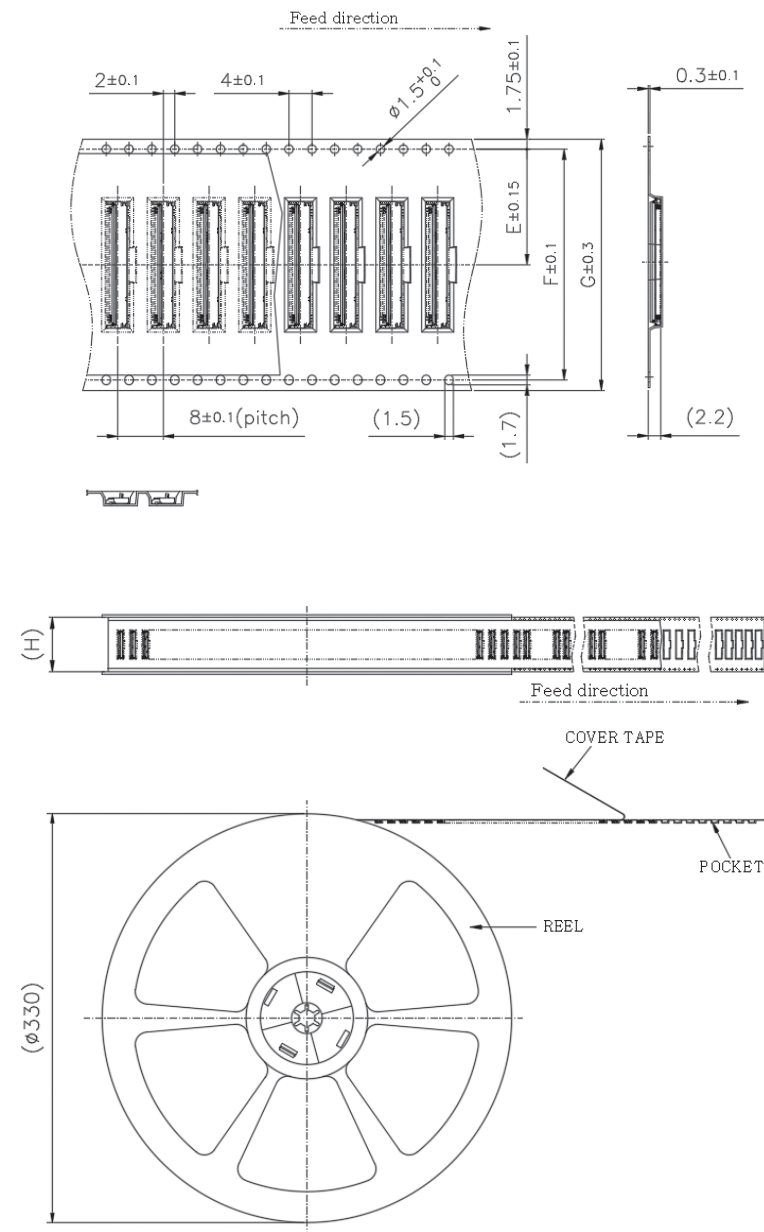
Note 2 : This connector has no polarity.

FPC Connector 2580S

Mobile Connector

PF025-B80B-C11

Packing Drawing



Unit : mm

Product No.	No. of Contacts	E	F	G	H
PF025-B07-C05	7	20.25	40.4	44.0	45.4

Note 1 : Please place orders in full reel quantities. (1Reel = 3,000ea)

Note 2 : This connector has no polarity.

FPC Connector FF

Mobile Connector

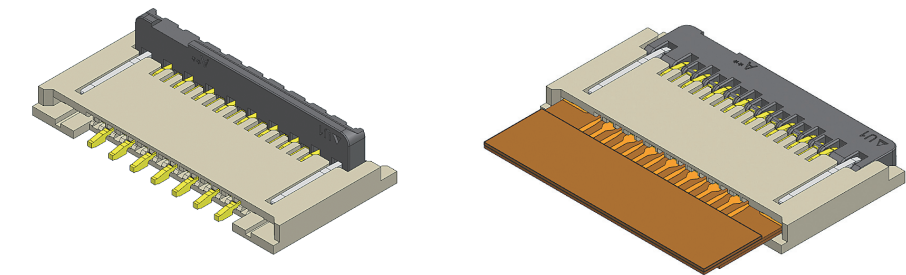
PF025-B07B-N05 | PF025-B15B-N05 | PF025-B17B-N05

Applications

- ▶ Smart phone
- ▶ Wearable devices
- ▶ Potable devices

Characteristics

- ▶ Ultra-low profile
- ▶ Space-saving design
- ▶ Back-Flip Lock mechanism
- ▶ FPC Cable lock



- ▶ 0.25mm Pitch, 0.5mm Height, Ultra narrow and compact design
- ▶ Easy to Insert FPC and operate Actuator Back-lock system
- ▶ High FPC Retention force with both Locking Terminal
- ▶ Applicable for FPC thickness is 0.12±0.02mm

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
Signal 0.2A Max.	120mΩ (Max.)	200V AC[RMS]	-35°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	CODE
7				3.7	PF025-B07B-N05
15	0.25	0.5	0.65	5.7	PF025-B15B-N05
17				6.2	PF025-B17B-N05

FPC Connector **FF**

Mobile Connector

PF025-B07B-N05 | PF025-B15B-N05 | PF025-B17B-N05

Product Specification

Ratings	Rated current	0.2A Max	Operating temperature range	-35°C to +85°C 1)	Storage temperature range	+15°C to +35°C
	Rated voltage	50V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

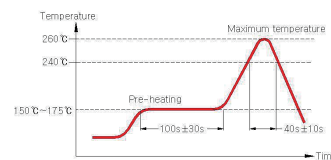
2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC Specification T=0.12±0.02mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	120mΩ Max. / contact	Closed circuit Current : 500μA Open circuit voltage : 20mV Max.
2. Insulation resistance	50MΩ Min.	Test voltage : 250V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 200V for 1minute
4. Actuator operation forces	7p : 0.8kgf Max. 15p : 0.9kgf Max. 17p : 0.93kgf Max.	Push the Actuator Open/ Close direction at a speed of 25mm/min and measured Actuator operation force.
5. FPC retention force	7p : 0.3kgf Min. 15p : 0.35kgf Min.. 17p : 0.36kgf Min.	Pull the FPC from a connector at a speed of 25mm/min and measured extraction force.
6. Durability	No damage or mechanical defect Contact resistance : 120mΩ Max. / contact	Number of cycles : 10 cycles.
7. Vibration	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out Contact resistance : 120mΩ Max. / contact	Amplitude: 1.5mm Acceleration: 15%g Frequency: 10~500Hz Duration : X,Y,Z axis each 30minutes..
8. Shock	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out	On concrete : 1.8m Height, six axis 3 times, 150g total weight On tile : 0.1m Height, XYZ axis 3,500 times, 150g total weight
9. Humidity	No damage or mechanical defect Contact resistance : 120mΩ Max. / contact Insulation Resistance : 50MΩ Min.	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	No damage or mechanical defect Contact resistance : 120mΩ Max. / contact Insulation Resistance : 50MΩ Min.	Temperature : 25~65~25~65~25--10~25°C Humidity : 90% ~ 95% 5 cycles

11. Solder heat resistance
Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.

Reflow condition.
(Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Natural Color	UL94V-0
Actuator	PPS	Black	UL94V-0
Contact Terminal A	Phosphor Bronze	Au over Nickel	-
Contact Terminal B	Phosphor Bronze	Au over Nickel	-
Locking Terminal	Phosphor Bronze	Sn over Nickel	-

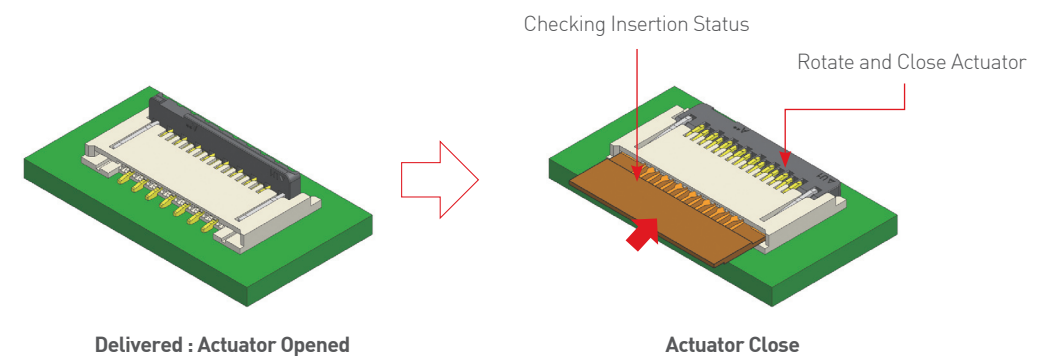
FPC Connector **FF**

Mobile Connector

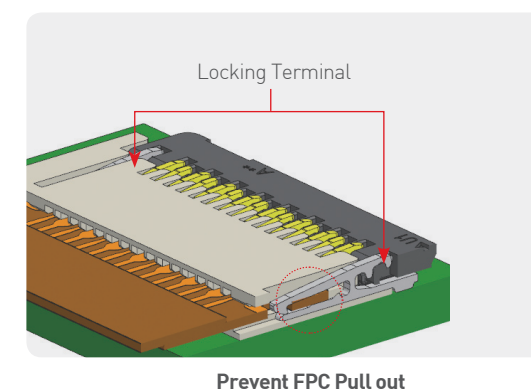
PF025-B07B-N05 | PF025-B15B-N05 | PF025-B17B-N05

FEATURES AND ADVANTAGES

- ▶ Easy to Insert FPC and operate Actuator close
Both Upper and Lower contact, Back Lock System



- ▶ High FPC Retention Force
Both Locking Terminal is holding FPC



FPC Connector **FF**

Mobile Connector

PF025-B07B-N05 | PF025-B15B-N05 | PF025-B17B-N05

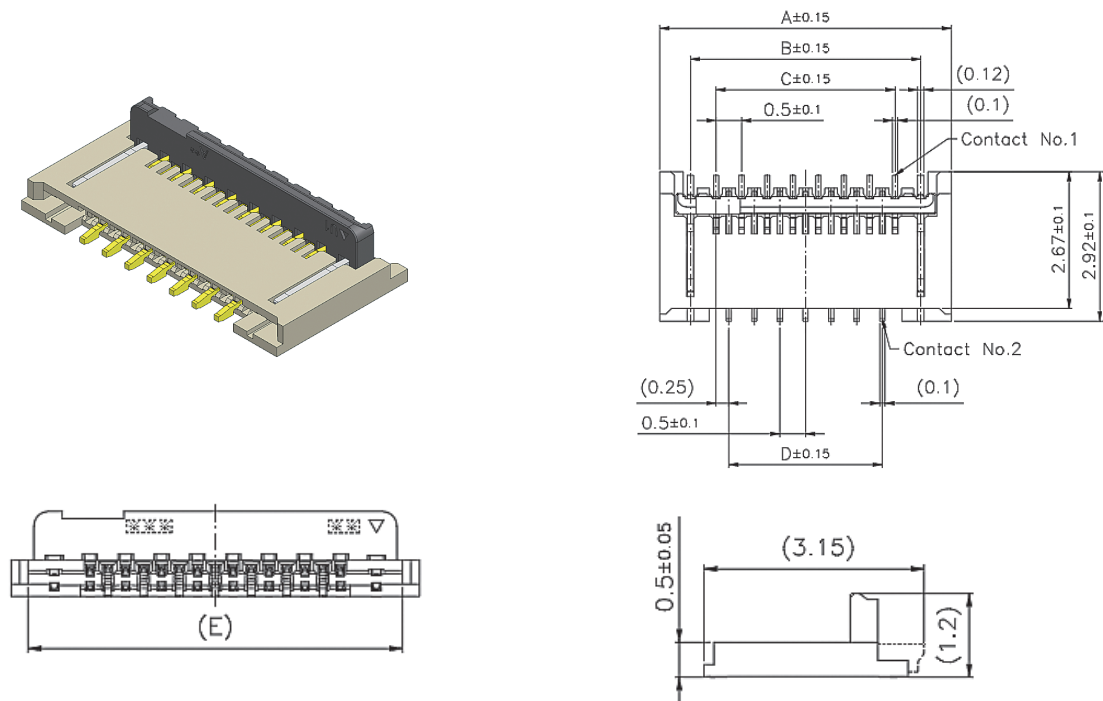
Product Number Structure

P **F** **018** - **B** **xx** **B** - **C** **05**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : FPC
- ② Style : FLIP
- ③ Contact Pitch : 0.25mm
- ④ Type : Back Flip
- ⑤ No. of position : 7P, 15p 17p
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting
- ⑧ Connector Height : 0.5mm

Product Drawing



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
PF025-B07-C05	7	3.7	2.5	1.5	1.0	3.23
PF025-B15-C05	15	5.7	4.5	3.5	3.0	5.25
PF025-B17-C05	17	6.2	5.0	4.0	3.5	5.73

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

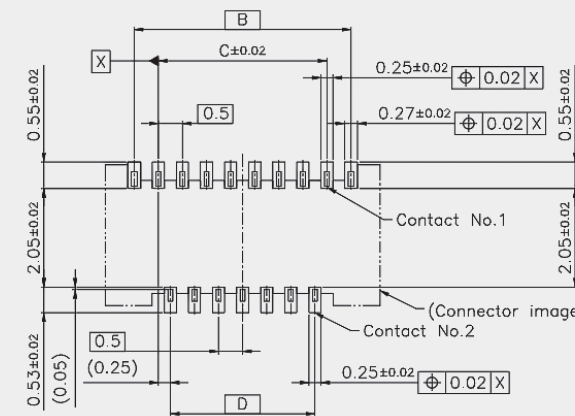
Note 2 : This connector has no polarity.

FPC Connector **FF**

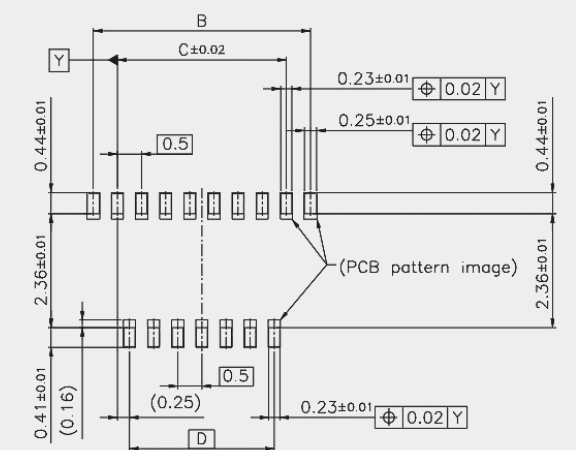
Mobile Connector

PF025-B07B-N05 | PF025-B15B-N05 | PF025-B17B-N05

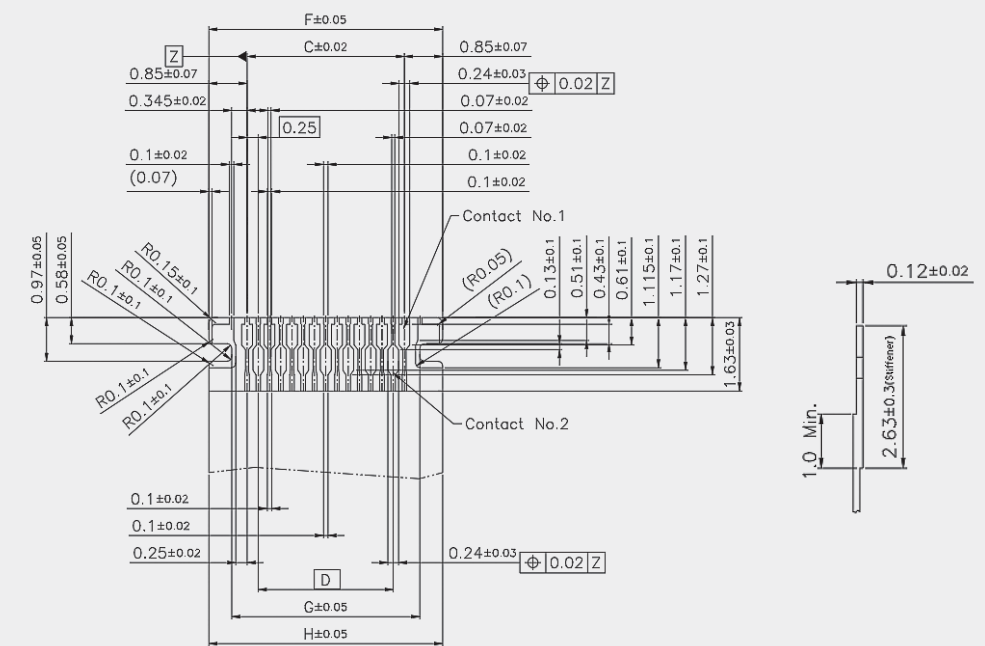
Recommended PCB , Metal Mask Layout



Recommended Metal Mask dimensions



Recommended FPC Dimensions



Unit : mm

Product No.	No. of Contacts	B	C	D	F	G	H
PF025-B07-C05	7	2.5	1.5	1.0	3.2	2.18	3.2
PF025-B15-C05	15	4.5	3.5	3.0	5.2	4.18	5.2
PF025-B17-C05	17	5.0	4.0	3.5	5.7	4.68	5.7

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

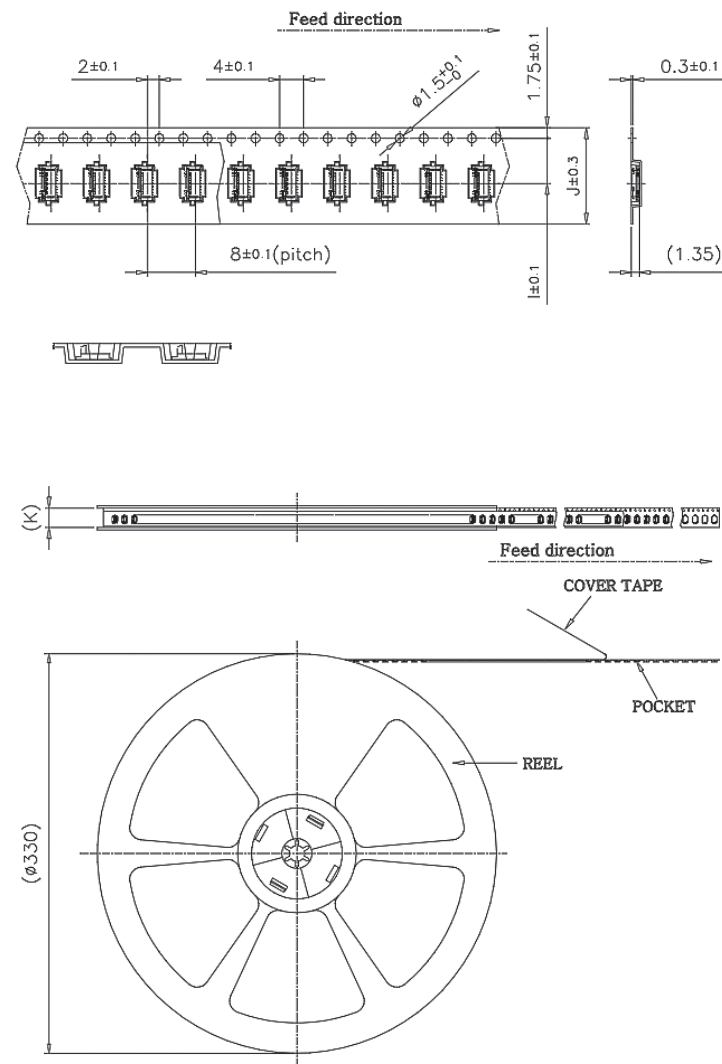
Note 2 : This connector has no polarity.

FPC Connector **FF**

Mobile Connector

PF025-B07B-N05 | PF025-B15B-N05 | PF025-B17B-N05

Packing Drawing



Unit : mm

Product No.	No. of Contacts	I	J	K
PF025-B07-C05	7	7.5	16.0	17.4
PF025-B15-C05	15	7.5	16.0	17.4
PF025-B17-C05	17	7.5	16.0	17.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

FPC Connector **0.3 F/F Short**

Mobile Connector

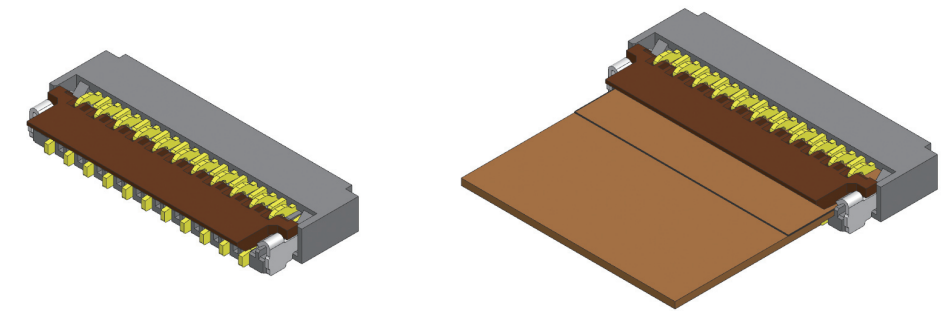
PF030-O**B-C10-H

Applications

- ▶ Smart phone
- ▶ Wearable devices
- ▶ Potable devices

Characteristics

- ▶ ZIF, Right Angle
- ▶ Front Flip Lock mechanism
- ▶ Double side lead array



- ▶ 0.3mm Pitch, 1.0mm Height, Low-contact, Right Angle Type
- ▶ Easy FPC Insertion (ZIF)
- ▶ Applicable for FPC thickness is 0.20±0.03mm

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
0.3A	50mΩ [Max.]	200V AC[RMS]	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Length	CODE
13	0.3	3.20	1.0	5.4	PF030-013B-C10-H
25				9.0	PF030-025B-C10-H
31				10.8	PF030-031B-C10-H
39				13.2	PF030-039B-C10-H
45				15.0	PF030-045B-C10-H
61				19.8	PF030-061B-C10-H

FPC Connector 0.3 F/F Short

Mobile Connector

PF030-0**B-C10-H

Product Specification

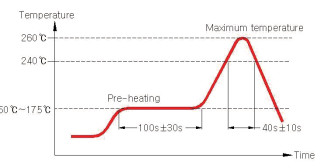
Ratings	Rated current	0.2A Max.	Operating temperature range	-35°C to +85°C 1	Storage temperature range	15°C ~ 35°C
	Rated voltage	30V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC Specification : T=0.20±0.03mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	100mΩ Max. / contact	Closed circuit Current : 1mA, Open circuit voltage : 20mV Max.
2. Insulation resistance	50MΩ Min. / contact	Test voltage : 500V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 200V for 1minute
4. Actuator operation forces	0.003kgf x (N) Min. (N)=pins	Push the Actuator Open/ Close direction at a speed of 25mm/min and measured Actuator operation force.
5. FPC retention force	0.02kgf x (N) Min. (N)=pins	Pull the FPC from a connector at a speed of 25mm/min and measured extraction force.
6. Durability	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact	Number of cycles : 10 cycles.
7. Vibration	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out Contact resistance : 100mΩ Max. / contact	Amplitude: 1.5mm Frequency: 10~500Hz Duration : X,Y,Z axis each 30minutes.
8. Humidity	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact Insulation Resistance : 50MΩ Min.	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr

9. Solder heat resistance	Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.	Reflow : Refer to the recommended reflow condition.
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Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Actuator	PA	Brown	UL94HB
Contact Terminal	Phosphor Bronze	Au over Nickel	-
Fitting Nail	Phosphor Bronze	Sn	-

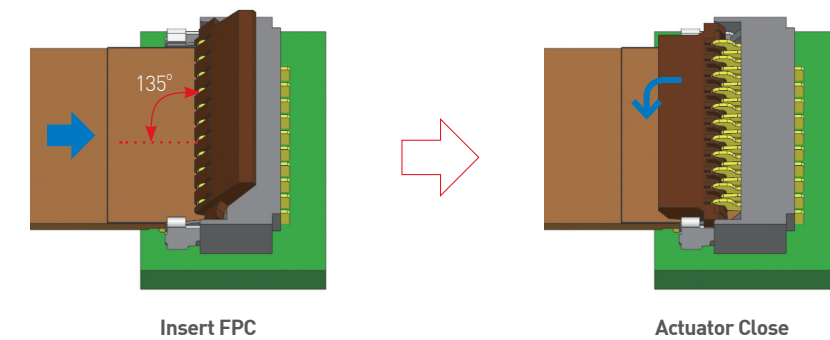
FPC Connector 0.3 F/F Short

Mobile Connector

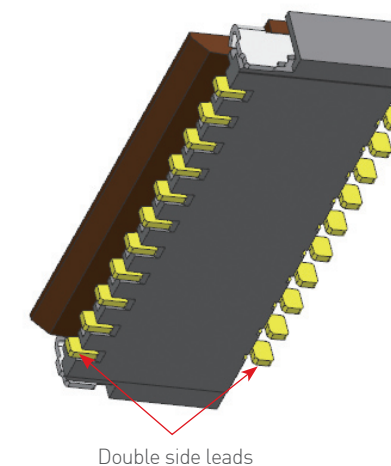
PF030-0**B-C10-H

FEATURES AND ADVANTAGES

- Superior Operability with Flip Lock and ZIF mechanism
Both Upper and Lower contact, Back Lock System



- Double side leads enhances Solder peeling Strength



FPC Connector 0.3 F/F Short

Mobile Connector

PF030-0**B-C10-H

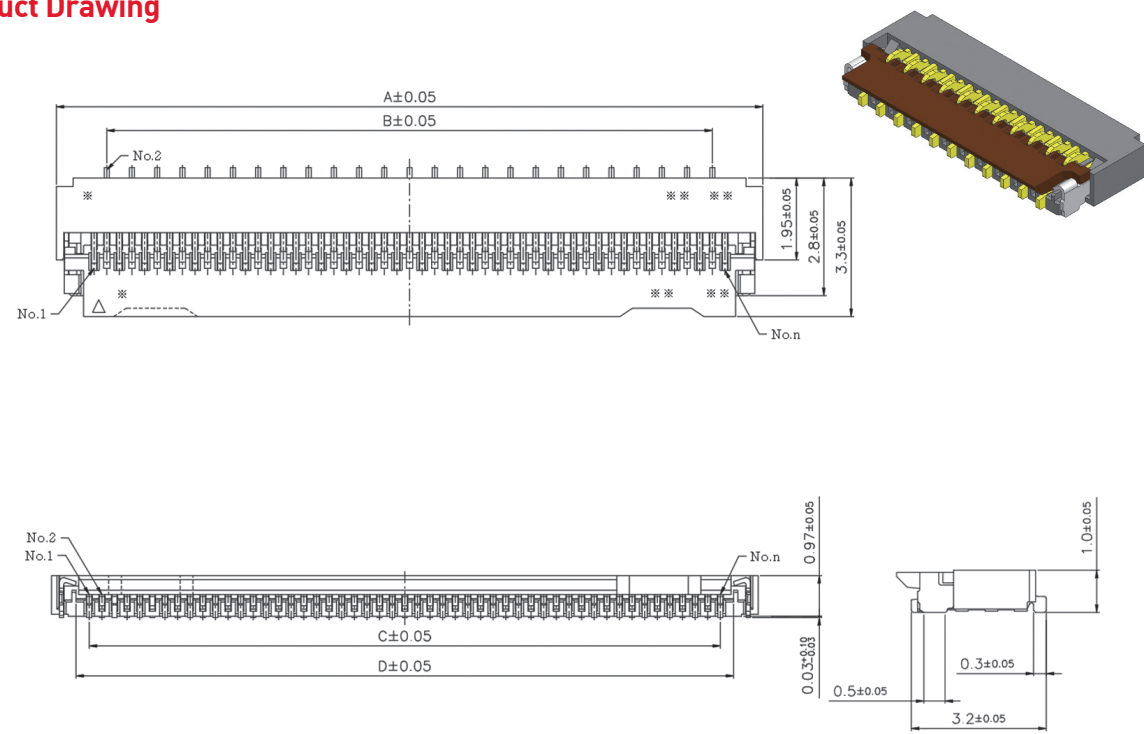
Product Number Structure

P **F** **030** - **0** **xx** **B** - **C** **10** - **H**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : FPC
- ② Style : FLIP
- ③ Contact Pitch : 0.30mm
- ④ Type : Front Flip
- ⑤ No. of position : 13p, 25p, 31p, 39p, 45p, 61p
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 1.0mm
- ⑨ Option

Product Drawing



Unit : mm

Product No.	No. of Contacts	A	B	C	D
PF030-013B-C10-H	13	5.4	3.0	3.6	4.23
PF030-025B-C10-H	25	9.0	6.6	7.2	7.83
PF030-031B-C10-H	31	10.8	8.4	9.0	9.63
PF030-039B-C10-H	39	13.2	10.8	11.4	12.03
PF030-045B-C10-H	45	15.0	12.6	13.2	13.83
PF030-061B-C10-H	61	19.8	17.4	18.0	18.63

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

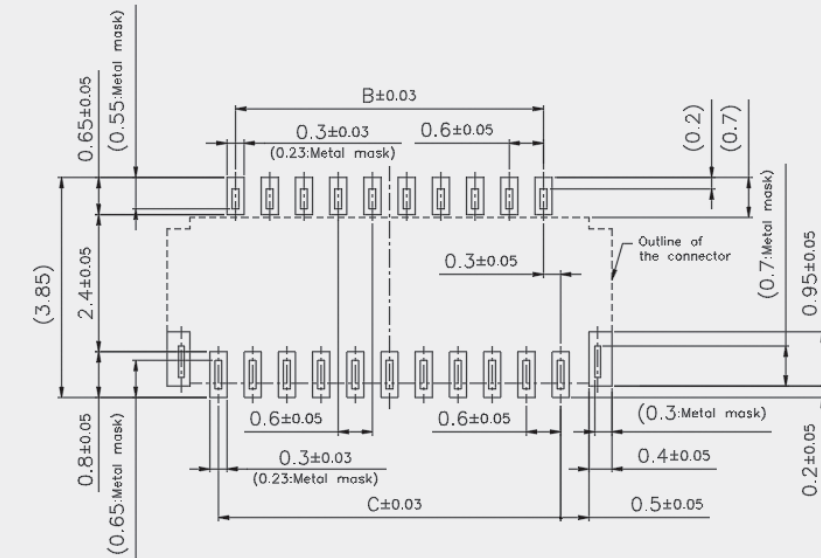
Note 2 : This connector has no polarity.

FPC Connector 0.3 F/F Short

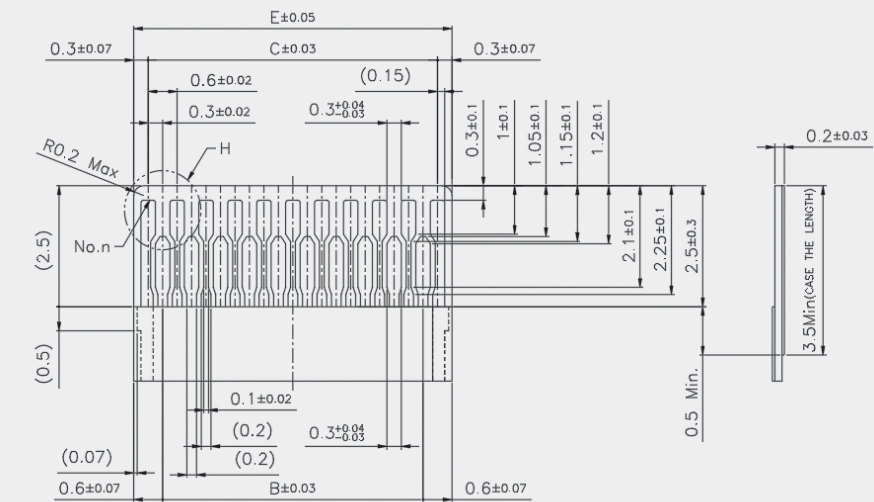
Mobile Connector

PF030-0**B-C10-H

Recommended PCB Layout, Metal Mask dimensions



Recommended FPC Dimensions



Unit : mm

Product No.	No. of Contacts	B	C	E
PF030-013B-C10-H	13	3.0	3.6	4.2
PF030-025B-C10-H	25	6.6	7.2	7.8
PF030-031B-C10-H	31	8.4	9.0	9.6
PF030-039B-C10-H	39	10.8	11.4	12.0
PF030-045B-C10-H	45	12.6	13.2	13.8
PF030-061B-C10-H	61	17.4	18.0	18.6

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

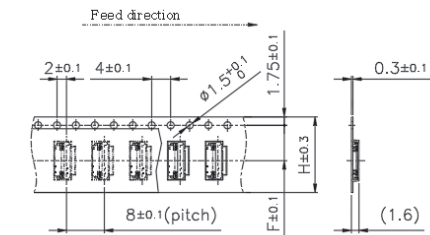
FPC Connector 0.3 F/F Short

Mobile Connector

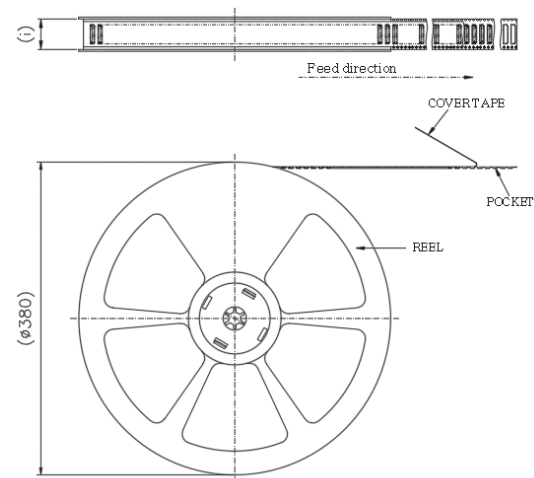
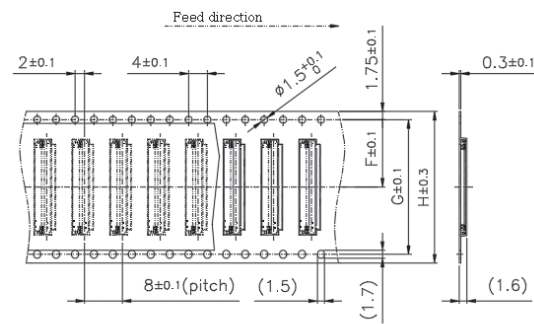
PF030-0**B-C10-H

Packing Drawing

[Emboss Tape Width of 24mm Max.]



[Emboss Tape Width of 32mm Min.]



Unit : mm

Product No.	No. of Contacts	F	G	H	I
PF030-013B-C10-H	13	7.5	-	16	17.4
PF030-025B-C10-H	25	7.5	-	16	17.4
PF030-031B-C10-H	31	7.5	-	16	17.4
PF030-039B-C10-H	39	11.5	-	24	25.4
PF030-045B-C10-H	45	11.5	-	24	25.4
PF030-061B-C10-H	61	14.2	28.4	32	33.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

FPC Connector 0.3 F/F Long

Mobile Connector

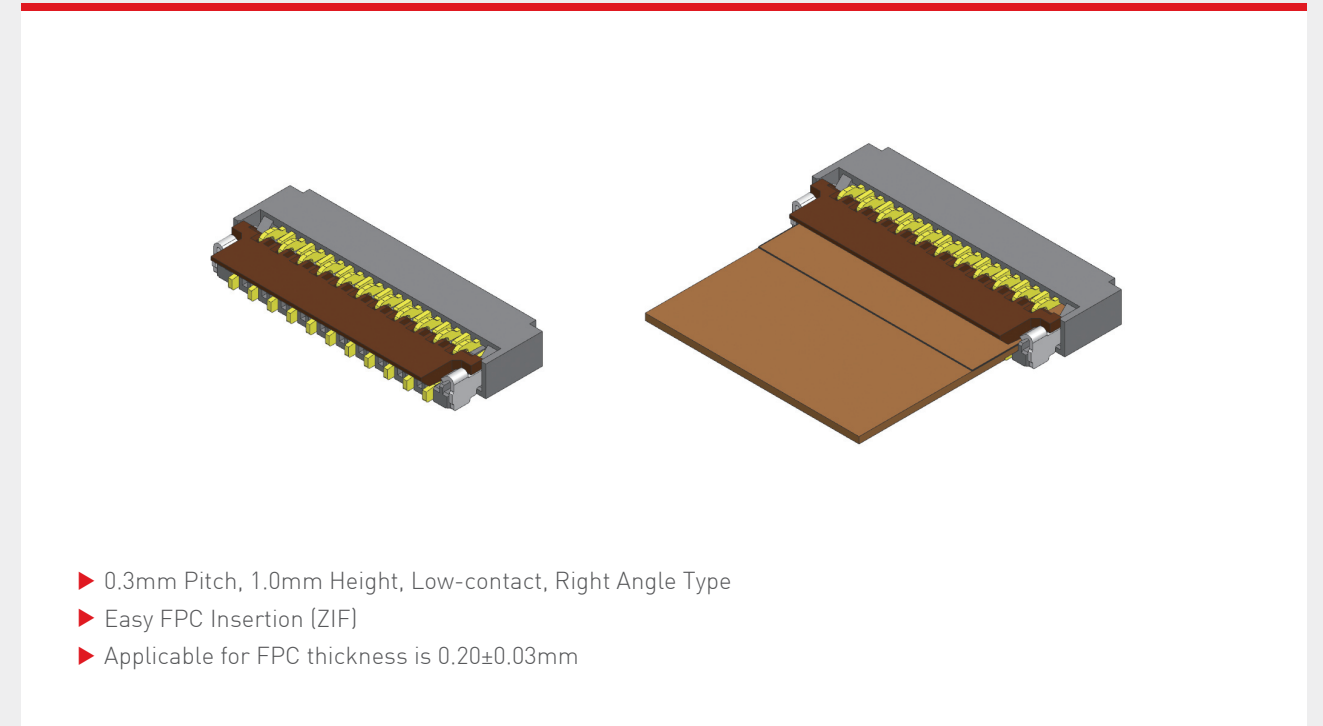
PF030-0**B-C09-H

Applications

- ▶ Smart phone
- ▶ Wearable devices
- ▶ Potable devices

Characteristics

- ▶ ZIF, Right Angle
- ▶ Front Flip Lock mechanism
- ▶ Double side lead array



- ▶ 0.3mm Pitch, 1.0mm Height, Low-contact, Right Angle Type
- ▶ Easy FPC Insertion (ZIF)
- ▶ Applicable for FPC thickness is 0.20±0.03mm

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
0.2A Max.	50mΩ [Max.]	200V AC[RMS]	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Lenght	CODE
13				5.4	PF030-013B-C09-H
31	0.3	3.45	1.0	10.8	PF030-031B-C09-H
61				19.8	PF030-061B-C09-H

FPC Connector 0.3 F/F Long

Mobile Connector

PF030-0**B-C09-H

Product Specification

Ratings	Rated current	0.2A Max.	Operating temperature range	-35°C to +85°C 1	Storage temperature range	15°C ~ 35°C
	Rated voltage	30V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

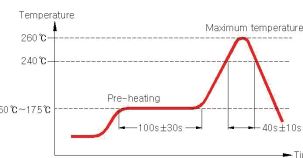
Applicable FPC Specification : T=0.20±0.03mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	100mΩ Max. / contact	Closed circuit Current : 1mA, Open circuit voltage : 20mV Max.
2. Insulation resistance	50MΩ Min. / contact	Test voltage : 500V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 200V for 1minute
4. Actuator operation forces	0.003kgf x (N) Min. (N)=pins	Push the Actuator Open/ Close direction at a speed of 25mm/min and measured Actuator operation force.
5. FPC retention force	0.02kgf x (N) Min. (N)=pins	Pull the FPC from a connector at a speed of 25mm/min and measured extraction force.
6. Durability	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact	Number of cycles : 10 cycles.
7. Vibration	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out Contact resistance : 100mΩ Max. / contact	Amplitude: 1.5mm Frequency: 10~500Hz Duration : X,Y,Z axis each 30minutes.
8. Humidity	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact Insulation Resistance : 50MΩ Min.	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr

9. Solder heat resistance

Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.

Reflow : Refer to the recommended reflow condition.



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Actuator	PA	Brown	UL94HB
Contact Terminal	Phosphor Bronze	Au over Nickel	-
Fitting Nail	Phosphor Bronze	Sn	-

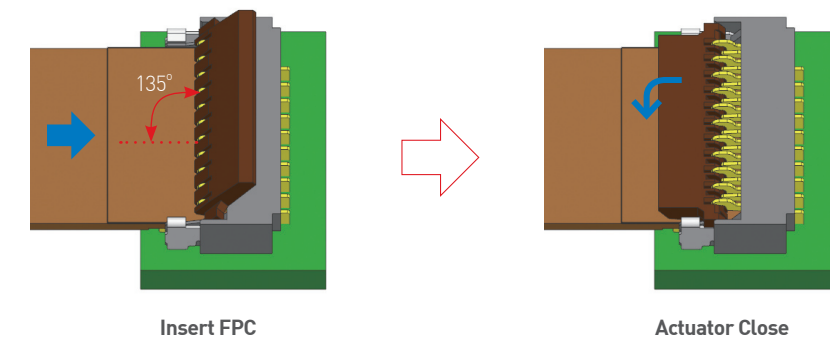
FPC Connector 0.3 F/F Long

Mobile Connector

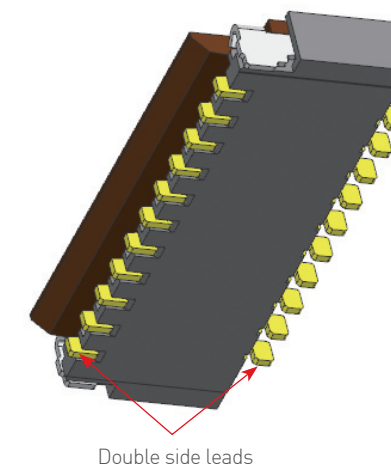
PF030-0**B-C09-H

FEATURES AND ADVANTAGES

- Superior Operability with Flip Lock and ZIF mechanism
Both Upper and Lower contact, Back Lock System



- Double side leads enhances Solder peeling Strength



FPC Connector 0.3 F/F Long

Mobile Connector

PF030-0**B-C09-H

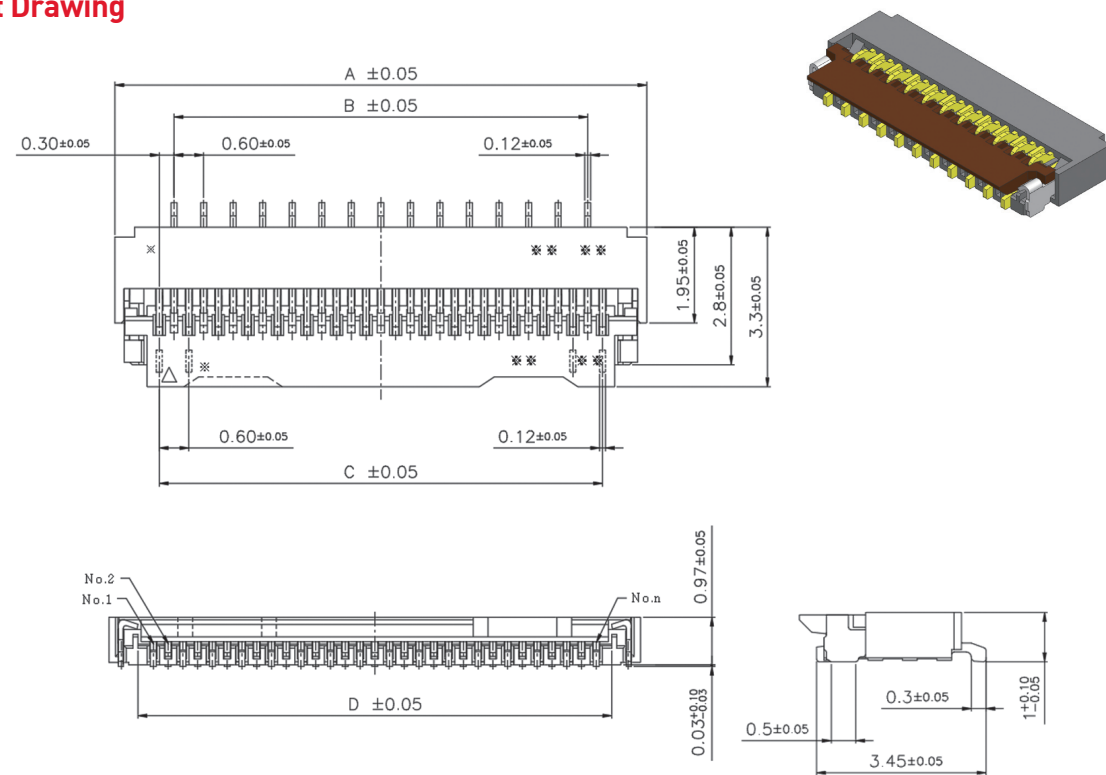
Product Number Structure

P **F** **030** - **0** **xx** **B** - **C** **09** - **H**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : FPC
- ② Style : FLIP
- ③ Contact Pitch : 0.30mm
- ④ Type : Front Flip
- ⑤ No. of position : 13p, 25p, 31p, 39p, 45p, 61p
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 1.0mm
- ⑨ Option

Product Drawing



Unit : mm

Product No.	No. of Contacts	A	B	C	D
PF030-013B-C09-H	13	5.4	3.0	3.6	4.23
PF030-031B-C09-H	31	10.8	8.4	9.0	9.63
PF030-061B-C09-H	61	19.8	17.4	18.0	18.63

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

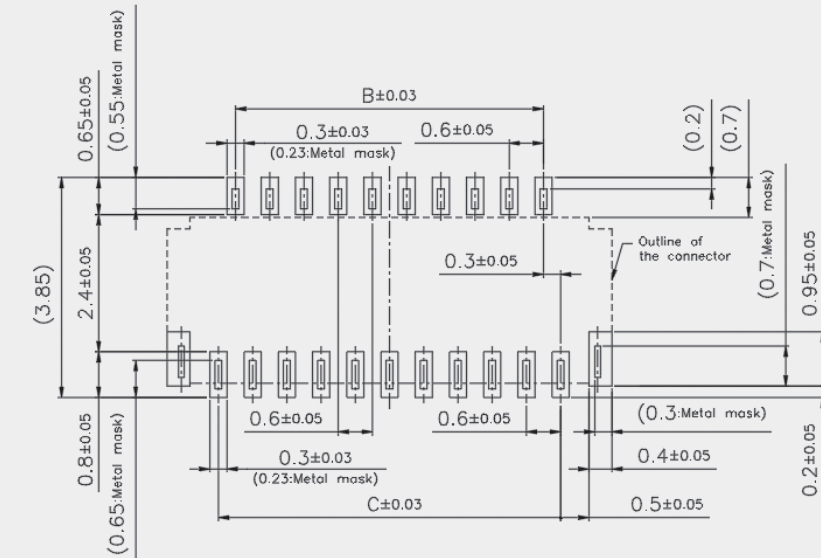
Note 2 : This connector has no polarity.

FPC Connector 0.3 F/F Long

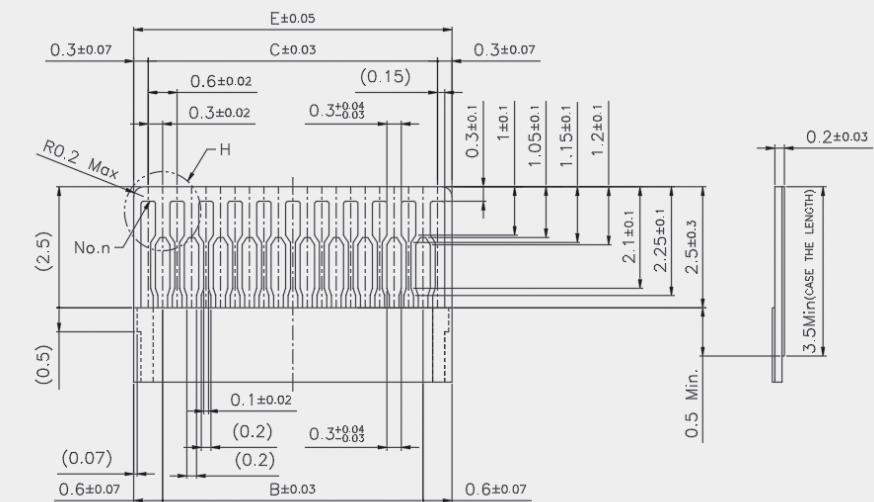
Mobile Connector

PF030-0**B-C09-H

Recommended PCB Layout, Metal Mask dimensions



Recommended FPC Dimensions



Unit : mm

Product No.	No. of Contacts	B	C	E
PF030-013B-C09-H	13	5.4	3.0	4.2
PF030-031B-C09-H	31	10.8	8.4	9.6
PF030-061B-C09-H	61	19.8	17.4	18.6

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

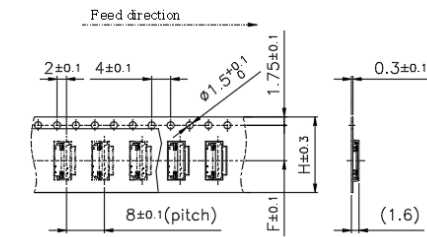
FPC Connector 0.3 F/F Long

Mobile Connector

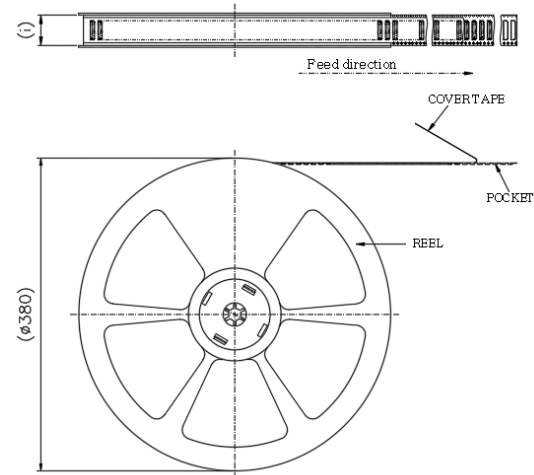
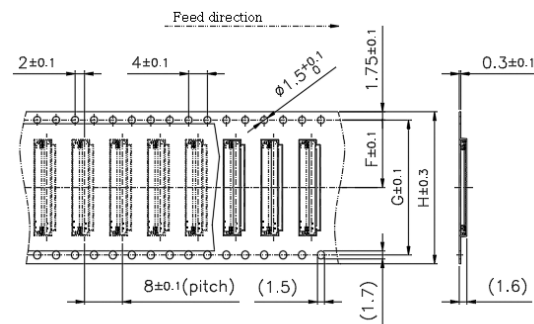
PF030-0**B-C09-H

Packing Drawing

[Emboss Tape Width of 24mm Max.]



[Emboss Tape Width of 32mm Min.]



Unit : mm

Product No.	No. of Contacts	F	G	H	I
PF030-013B-C09-H	13	7.5	-	16	17.4
PF030-031B-C09-H	31	7.5	-	16	17.4
PF030-061B-C09-H	61	14.2	28.4	32	33.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

FPC Connector KARA

Mobile Connector

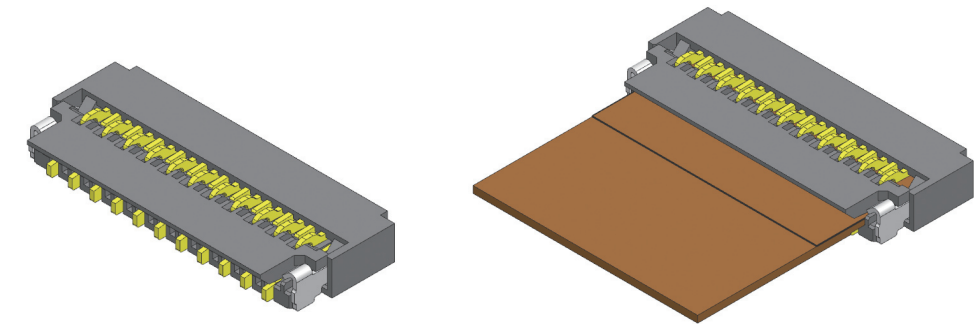
PF030-021B-C09-A

Applications

- ▶ Smart phone
- ▶ Wearable devices
- ▶ Potable devices

Characteristics

- ▶ ZIF, Right Angle
- ▶ Front Flip Lock mechanism
- ▶ Double side lead array



- ▶ 0.3mm Pitch, 0.95mm Height, Low-contact, Right Angle Type
- ▶ Easy FPC Insertion (ZIF)
- ▶ Applicable for FPC thickness is 0.20±0.03mm

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
0.2A Max.	50mΩ [Max.]	200V AC[RMS]	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Lenght	Product No.
21	0.3	3.45	0.95	7.8	PF030-021B-C09-A

FPC Connector **KARA**

Mobile Connector

PF030-021B-C09-A

Product Specification

Ratings	Rated current	0.2A Max.	Operating temperature range	-35°C to +85°C 1	Storage temperature range	15°C ~ 35°C
	Rated voltage	30V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

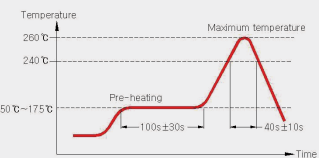
1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC Specification : T=0.20±0.03mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	100mΩ Max. / contact	Closed circuit Current : 1mA. Open circuit voltage : 20mV Max.
2. Insulation resistance	50MΩ Min. / contact	Test voltage : 500V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 200V for 1minute
4. Actuator operation forces	0.063kgf Min.	Push the Actuator Open/ Close direction at a speed of 25mm/min and measured Actuator operation force.
5. FPC retention force	0.42kgf Min.	Pull the FPC from a connector at a speed of 25mm/min and measured extraction force.
6. Durability	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact	Number of cycles : 10 cycles.
7. Vibration	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out Contact resistance : 100mΩ Max. / contact	Amplitude: 1.5mm Frequency: 10~500Hz Duration : X,Y,Z axis each 30minutes.
8. Shock	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out Contact resistance : 100mΩ Max. / contact	Acceleration : 50G (490%) Duration : 11ms Number of shocks : 3 times per each direction Test current : 100mA
9. Humidity	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact Insulation Resistance : 500MΩ Min.	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr

10. Solder heat resistance	Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.	Reflow : Refer to the recommended reflow condition.
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Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Actuator	PPS	Black	UL94V-0
Contact Terminal	Phosphor Bronze	Au over Nickel	-
Fitting Nail	Phosphor Bronze	Sn	-

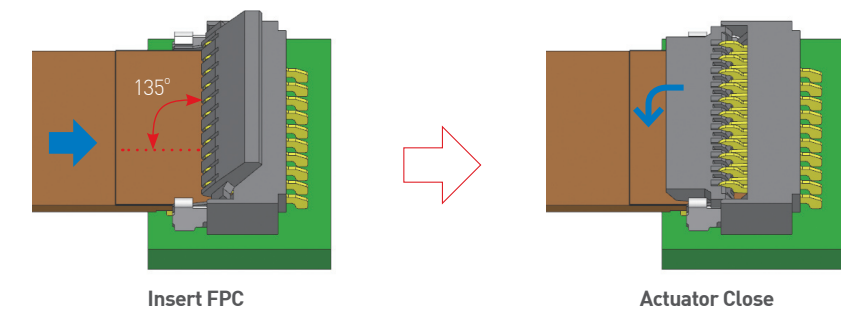
FPC Connector **KARA**

Mobile Connector

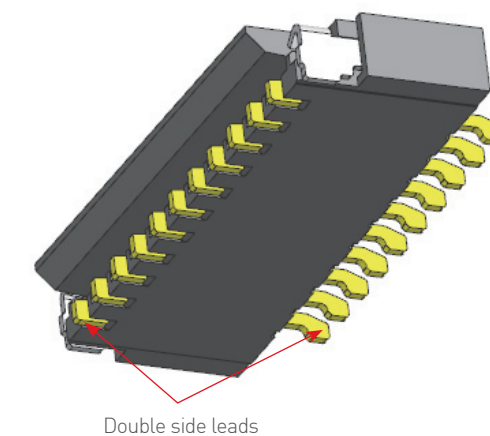
PF030-021B-C09-A

FEATURES AND ADVANTAGES

- ▶ Superior Operability with Flip Lock and ZIF mechanism
Easy to insert FPC and confirm tactile click clearly



- ▶ Double side leads enhances Solder peeling Strength



FPC Connector **KARA**

Mobile Connector

PF030-021B-C09-A

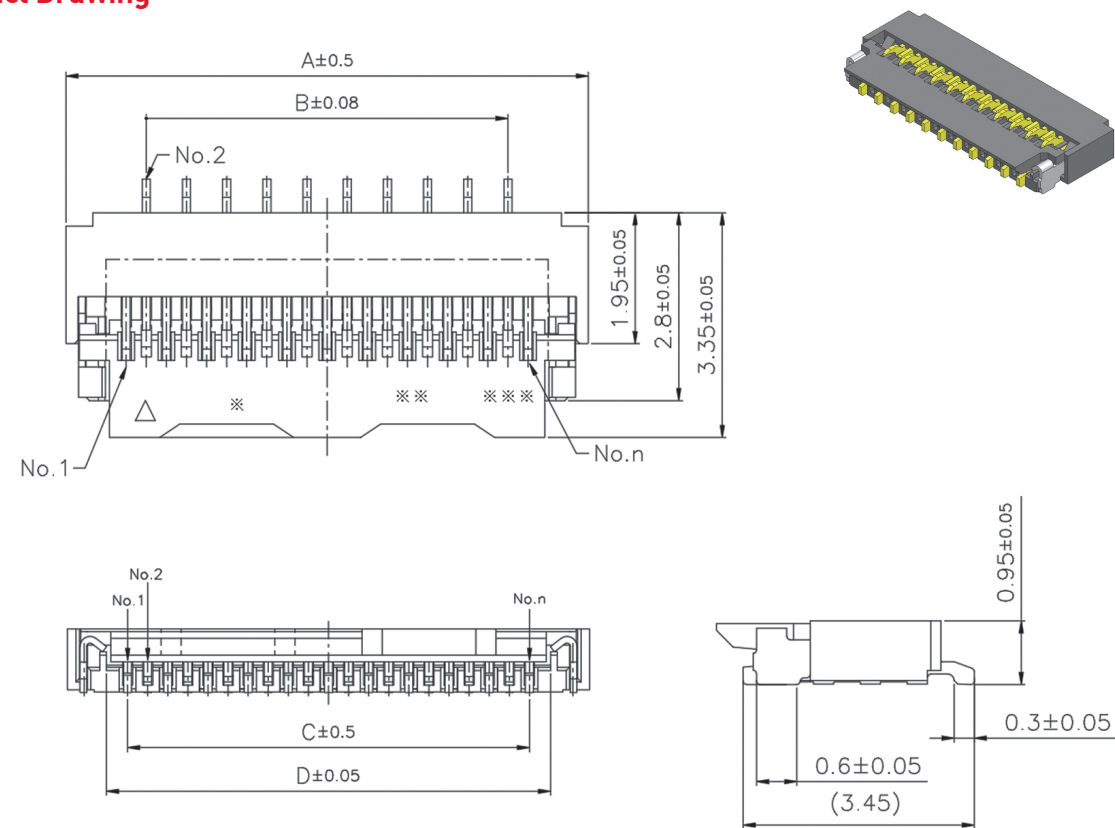
Product Number Structure

P **F** **030** - **0** **21** **B** - **C** **09** - **H**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : FPC
- ② Style : FLIP
- ③ Contact Pitch : 0.30mm
- ④ Type : Front Flip
- ⑤ No. of position : 21p
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.95mm
- ⑨ Option

Product Drawing



Unit : mm

Product No.	No. of Contacts	A	B	C	D
PF030-021B-C09-A	21	7.8	5.4	6.0	6.63

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

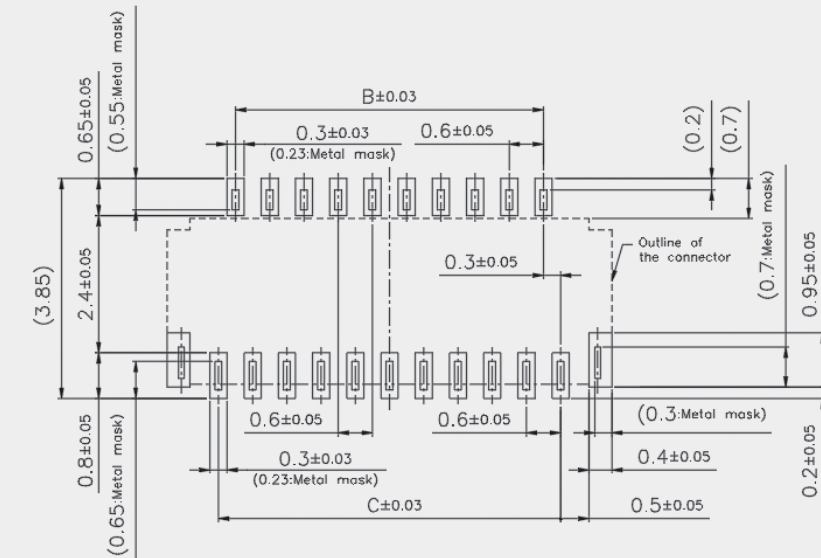
Note 2 : This connector has no polarity.

FPC Connector **KARA**

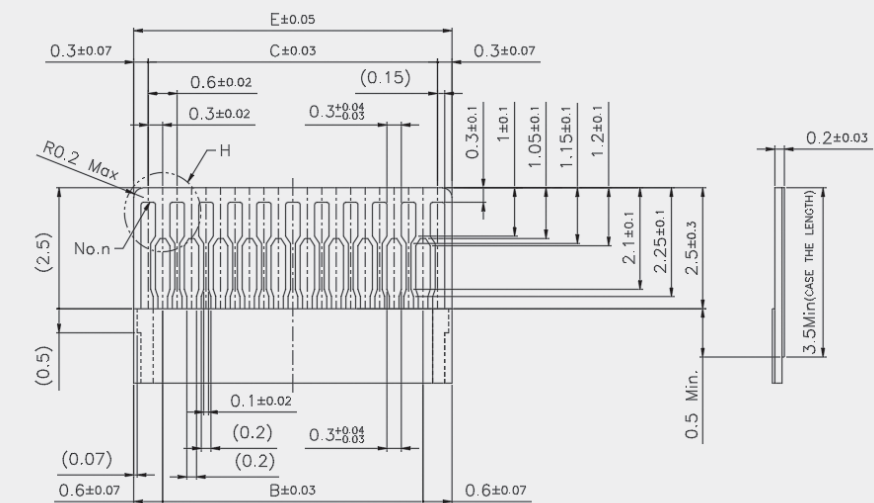
Mobile Connector

PF030-021B-C09-A

Recommended PCB Layout, Metal Mask dimensions



Recommended FPC Dimensions



Unit : mm

Product No.	No. of Contacts	B	C	E
PF030-021B-C09-A	21	5.4	6.0	6.6

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

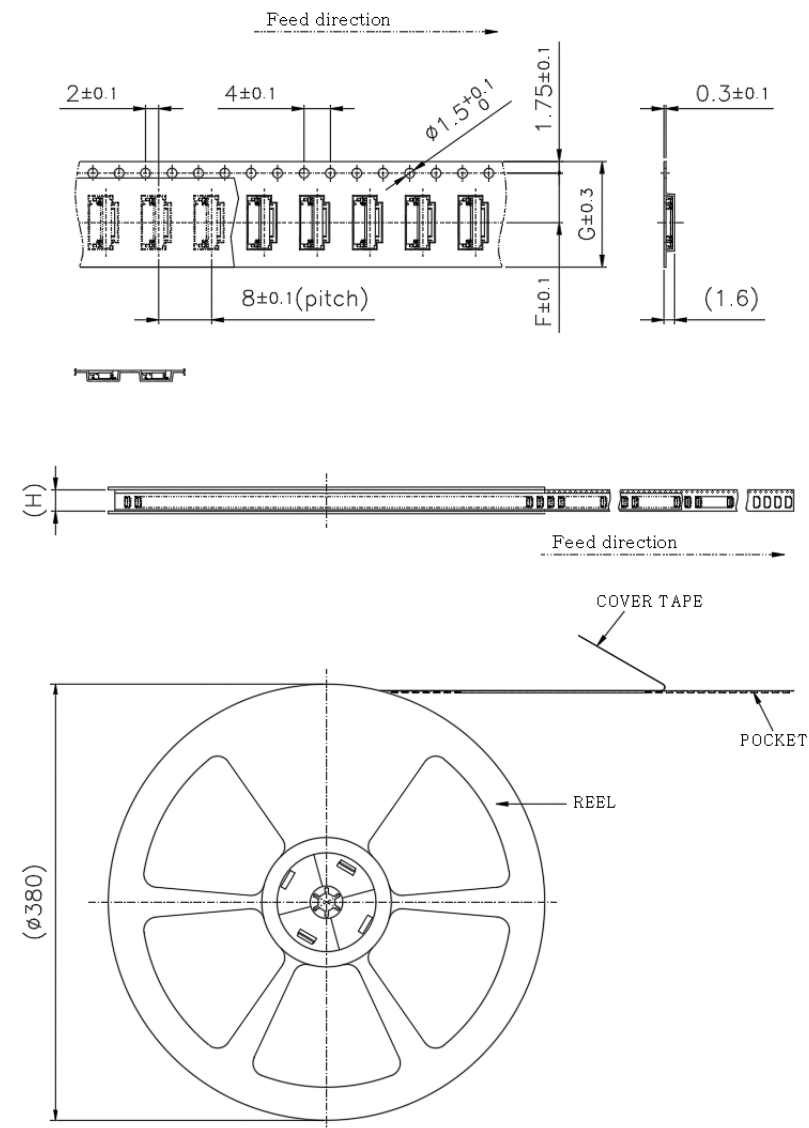
Note 2 : This connector has no polarity.

FPC Connector **KARA**

Mobile Connector

PF030-021B-C09-A

Packing Drawing



Unit : mm

Product No.	No. of Contacts	F	G	H
PF030-021B-C09-A	21	7.5	16.0	17.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

FPC Connector **0.5 H0.9 E**

Mobile Connector

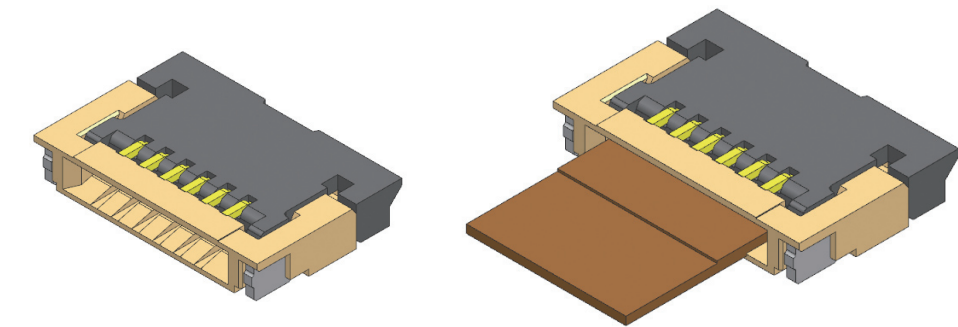
PF050-B**B-C09-A

Applications

- ▶ Smart phone
- ▶ Wearable devices
- ▶ Potable devices

Characteristics

- ▶ ZIF, Right Angle
- ▶ Back-Flip Lock mechanism
- ▶ FPC Cable lock



- ▶ 0.5mm Pitch, 0.9mm Height, Low-contact, Right Angle Type, ZIF
- ▶ Easy to Insert FPC and operate Actuator Back-lock system
- ▶ High FPC Retention force with Cable Lock System
- ▶ Applicable for FPC thickness is 0.20 ± 0.03 mm

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
0.4A Max.	50mΩ [Max.]	200V AC[RMS]	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
4	0.50	3.7	0.90	4.40	PF050-B04B-C09-A
6				5.40	PF050-B04B-C09-A

FPC Connector 0.5 H0.9 E

Mobile Connector

PF050-B**B-C09-A

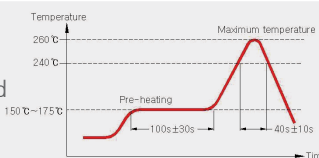
Product Specification

Ratings	Rated current	0.4A Max.	Operating temperature range	-35°C to +85°C 1	Storage temperature range	15°C ~ 35°C
	Rated voltage	50V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC Specification : T=0.20±0.03mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	50mΩ Max. / contact	Closed circuit Current : 1mA. Open circuit voltage : 20mV Max.
2. Insulation resistance	100MΩ Min. / contact	Test voltage : 500V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 200V for 1minute
4. Actuator operation forces	Actuator Close : 0.5kgf Max. Actuator Open : 0.03~0.5kgf	Push the Actuator Open/ Close direction at a speed of 25mm/min and measured Actuator operation force.
5. FPC retention force	0.5kgf Min.	Pull the FPC from a connector at a speed of 25mm/min and measured extraction force.
6. Durability	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact	Number of cycles : 10 cycles.
7. Vibration	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out Contact resistance : 100mΩ Max. / contact	Amplitude: 1.5mm Frequency: 10~500Hz Duration : X,Y,Z axis each 30minutes.
8. Humidity	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact Insulation Resistance : 100MΩ Min.	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
9. Temperature cycle	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact	Temperature : -55~25~85~25°C Time : 30~5~30~5 Min.
10. Solder heat resistance	Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.	Reflow : Refer to the recommended reflow condition. 

Materials / Finish

Part	Materials	Finish	UL Regulation
Base	PA	Brown	UL94HB
Actuator	PA	Black	UL94HB
Contact Terminal	Phosphor Bronze	Au over Nickel	-
Fitting Nail	Brass	Sn	-

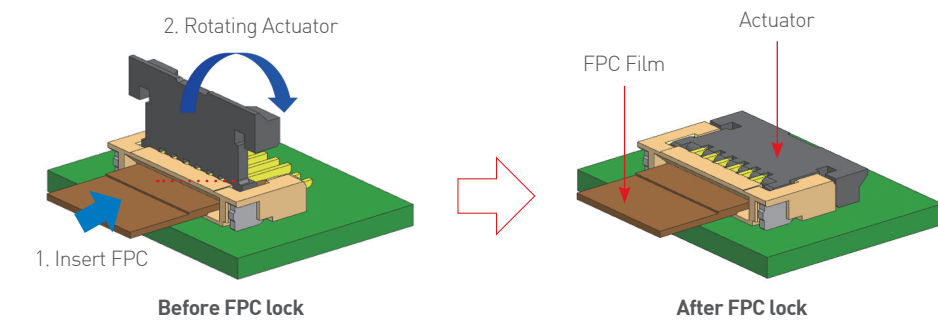
FPC Connector 0.5 H0.9 E

Mobile Connector

PF050-B**B-C09-A

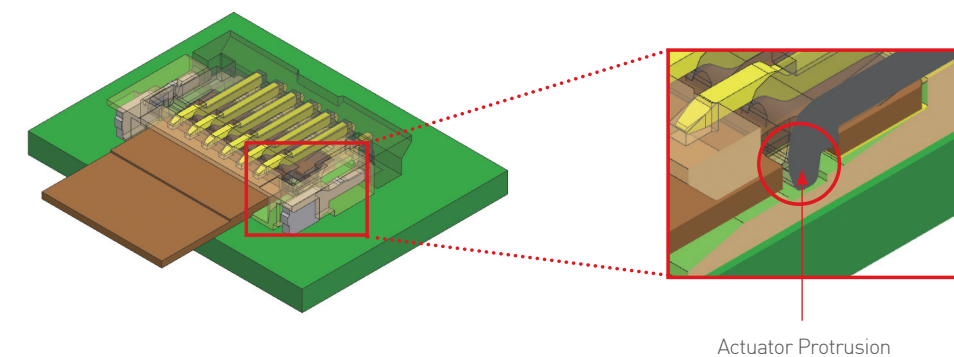
FEATURES AND ADVANTAGES

- ▶ Easy to Insert FPC and operate to Actuator back lock.
Actuator rotating opposite direction against FPC insertion. (Back flip)



▶ FPC side Locking structure design

When forcibly taking out FPC, Protrusion Locker help Increasing retention of FPC



FPC Connector 0.5 H0.9 E

Mobile Connector

PF050-B**B-C09-A

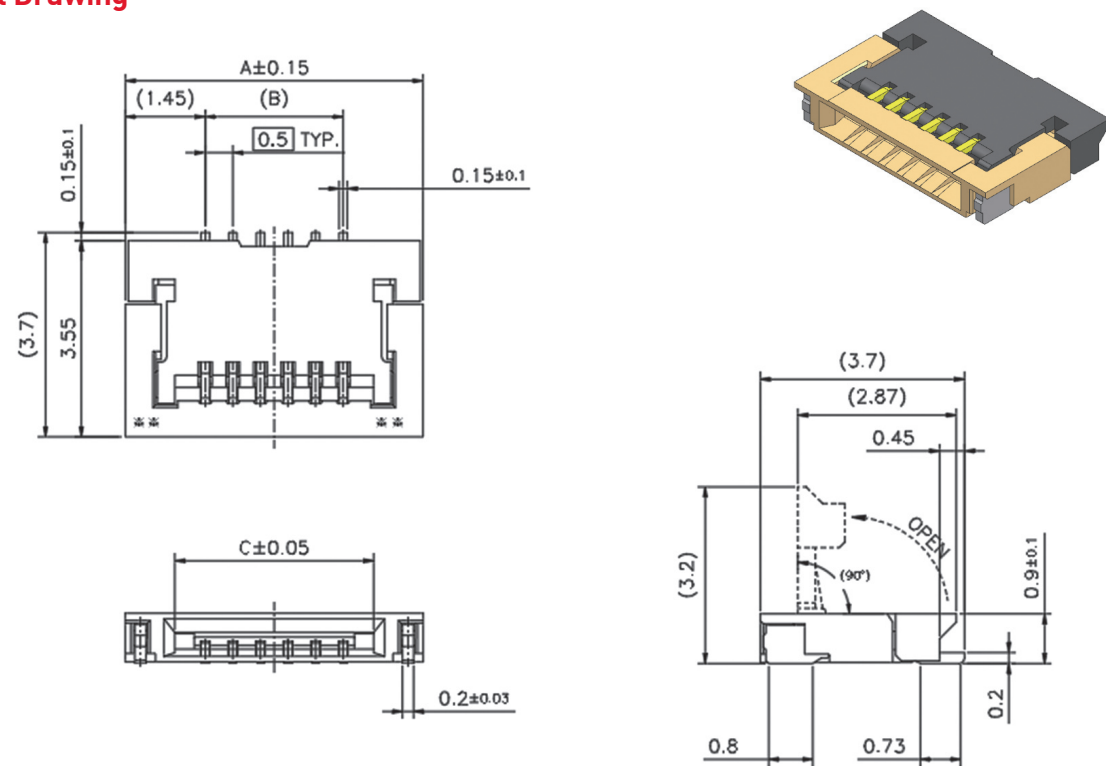
Product Number Structure

P **F** **050** - **B** **xx** **B** - **C** **09** - **A**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : FPC
- ② Style : FLIP
- ③ Contact Pitch : 0.50mm
- ④ Type : Back Flip
- ⑤ No. of position : 4p, 6p
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting Nail
- ⑧ Connector Height : 0.9mm
- ⑨ Option

Product Drawing



Unit : mm

Product No.	No. of Contacts	A	B	D
PF050-B04B-C09-A	4	4.4	1.5	2.6
PF050-B06B-C09-A	6	5.4	2.5	3.6

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

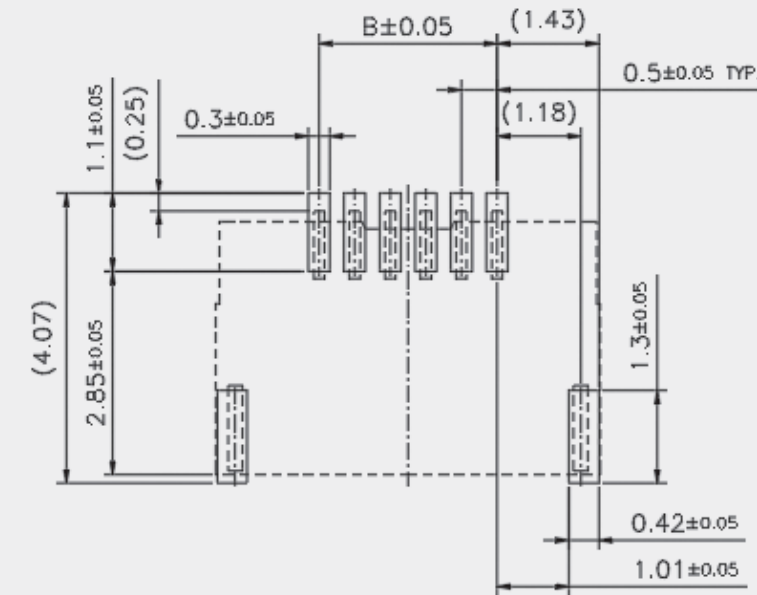
Note 2 : This connector has no polarity.

FPC Connector 0.5 H0.9 E

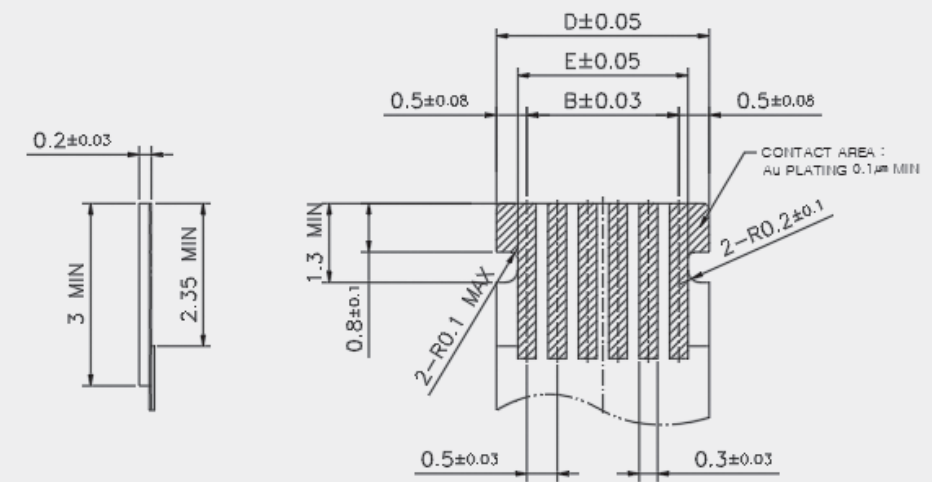
Mobile Connector

PF050-B**B-C09-A

Recommended PCB Layout, Metal Mask dimensions



Recommended FPC Dimensions



Unit : mm

Product No.	No. of Contacts	A	B	D
PF050-B04B-C09-A	4	1.5	2.5	1.8
PF050-B06B-C09-A	6	2.5	3.5	2.8

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

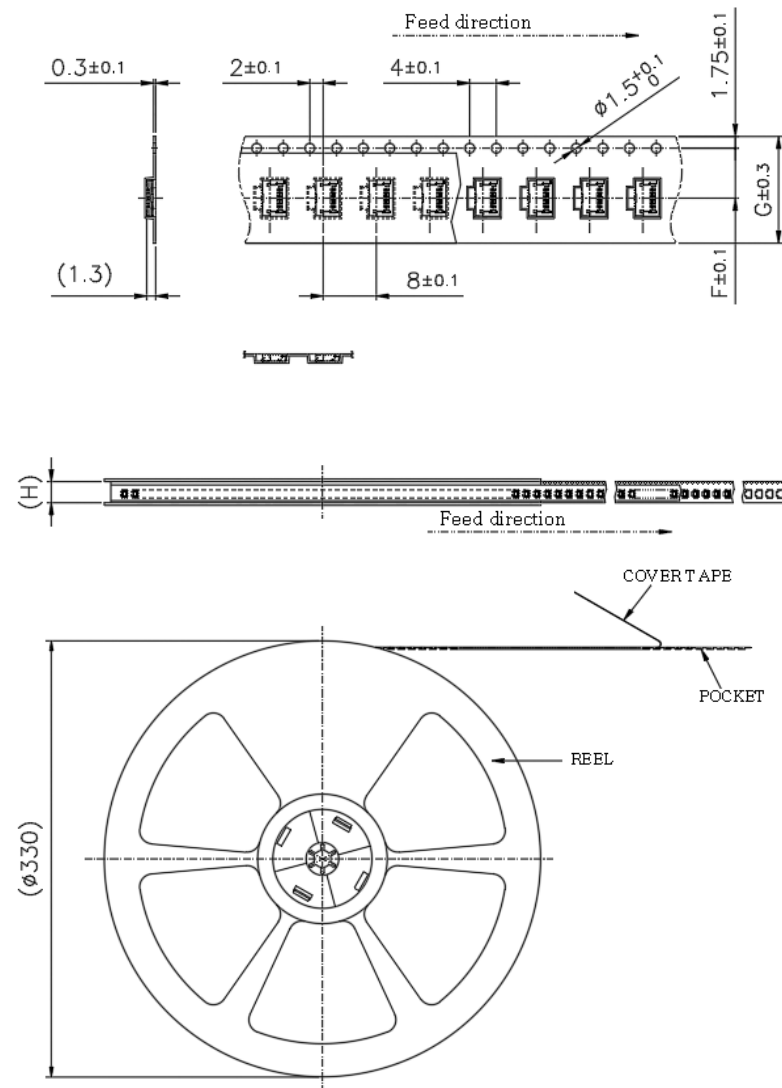
Note 2 : This connector has no polarity.

FPC Connector 0.5 H0.9 E

Mobile Connector

PF050-B**B-C09-A

Packing Drawing



Unit : mm

Product No.	No. of Contacts	F	G	H
PF050-B04B-C09-A	4	7.5	16.0	17.4
PF050-B06B-C09-A	6	7.5	16.0	17.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

FPC Connector 0409

Mobile Connector

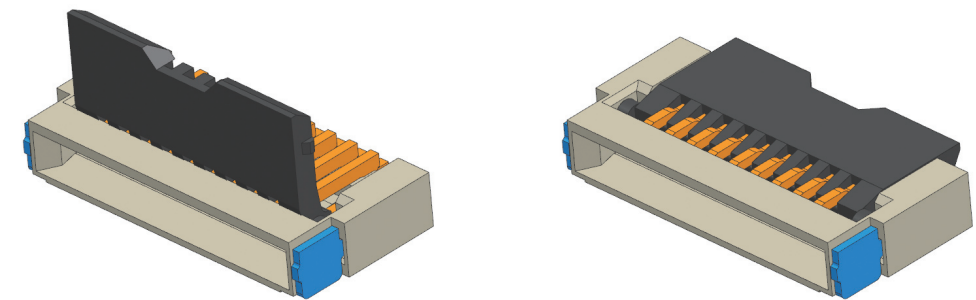
PF040-B09B-C09

Applications

- ▶ Smart phone
- ▶ Wearable devices
- ▶ Potable devices

Characteristics

- ▶ Space-saving design
- ▶ Back-Flip Lock mechanism
- ▶ FPC Cable lock



- ▶ 0.40mm Pitch, 0.90mm Height, compact design
- ▶ Easy to Insert FPC and operate Actuator Back-lock system
- ▶ High FPC Retention force with Actuator locking boss
- ▶ Applicable for FPC thickness is 0.2±0.03mm

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
0.5A Max.	100mΩ [Max.]	150V AC[RMS]	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Lenght	Product No.
9	0.40	3.00	0.90	5.40	PF040-B09B-C09

FPC Connector 0409

Mobile Connector

PF040-B09B-C09

Product Specification

Ratings	Rated current	0.5A Max.	Operating temperature range	-35°C to +85°C 1	Storage temperature range	15°C ~ 35°C
	Rated voltage	50V AC(RMS)/DC	Operating humidity range	70%RH 2)	Storage humidity range	65%RH Max. 2)

1) Including terminal temperature rise.

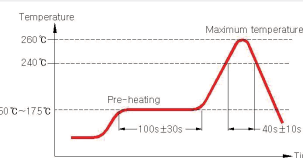
2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC Specification : T=0.20±0.03mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	100mΩ Max. / contact	Closed circuit Current : 1mA. Open circuit voltage : 20mV Max.
2. Insulation resistance	50MΩ Min. / contact	Test voltage : 100V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 150V for 1minute
4. Withdrawal Force	0.13kgf Min.	A connector shall be soldered on a board. An applicable FPC/FFC shall be pulled from a connector at a speed of 25mm/min and measured extraction force
5. Durability	Contact resistance : 100mΩ Max.	Repeated insertion and separation cycles of Max. 20 times
6. Vibration	1) Contact resistance : 100mΩ Max. 2) No damage, loose part nor crack	- Peak acceleration : 490m/s ² (50G) - Half sine wave : (Duration : 11ms) - Direction : 3direction (X,Y,Z) - Number : 3times per each direction - Test current : 100mA
7. Shock	1) Discontinuity : 1μs Max. 2) No mechanical defect	- Peak acceleration : 490m/s ² (50G) - Half sine wave : (Duration : 11ms) - Direction : 3direction (X,Y,Z) - Number : 3times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance : 100mΩ Max. 2) No damage, loose part nor Crack 3) Insulation Resistance : 50MΩ Min.	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr

9. Solder heat resistance
Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.

Reflow : Refer to the recommended reflow condition.



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Natural	UL94V-0
Actuator	LCP	Black	UL94V-0
Contact Terminal	Phosphor Bronze	Au over Nickel	-
Fitting Nail	Phosphor Bronze	Pre-plating Sn	-

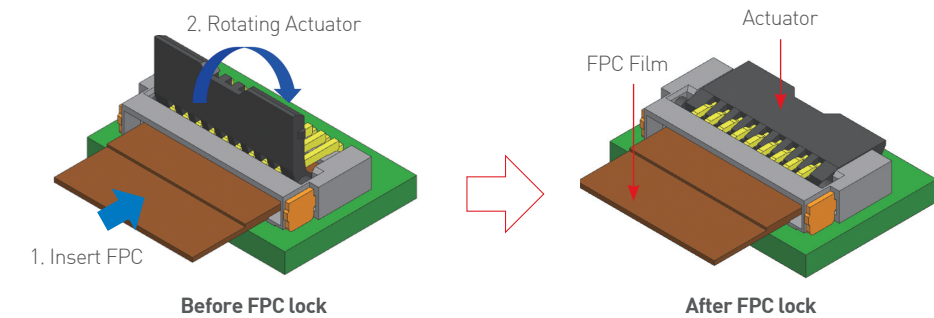
FPC Connector 0409

Mobile Connector

PF040-B09B-C09

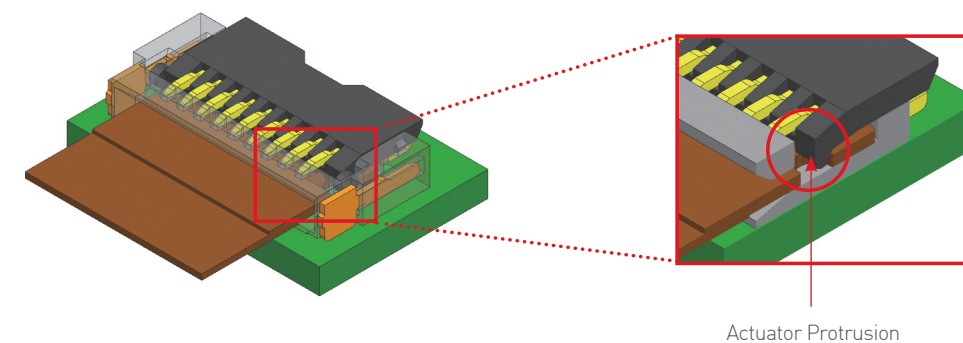
FEATURES AND ADVANTAGES

- ▶ Easy to Insert FPC and operate to Actuator back lock.
Actuator rotating opposite direction against FPC insertion. (Back flip)



▶ FPC side Locking structure design

When forcibly taking out FPC, Protrusion Locker help Increasing retention of FPC



FPC Connector 0409

Mobile Connector

PF040-B09B-C09

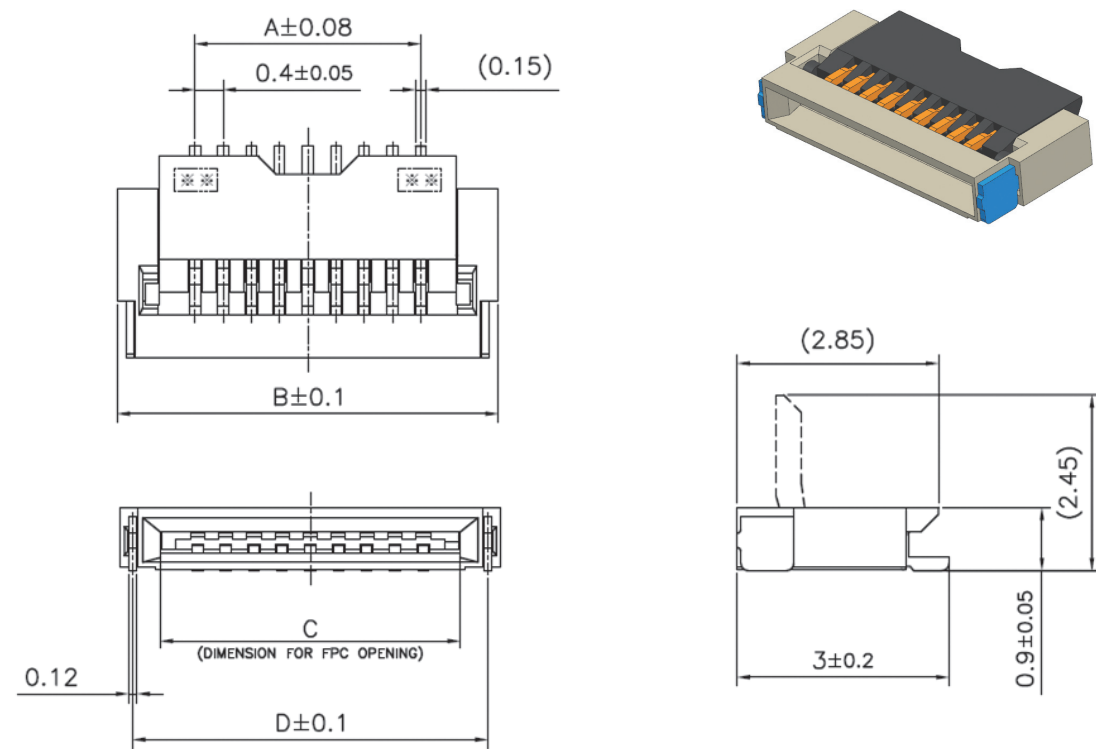
Product Number Structure

P **F** **040** - **B** **09** **B** - **C** **09**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : FPC
- ② Style : FLIP
- ③ Contact Pitch : 0.40mm
- ④ Type : Back Flip
- ⑤ No. of position : 9p
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : Fitting Nail
- ⑧ Connector Height : 0.9mm

Product Drawing



Unit : mm

Product No.	No. of Contacts	A	B	C	D
PF040-B09B-C09	9	3.20	5.40	4.25	5.03

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

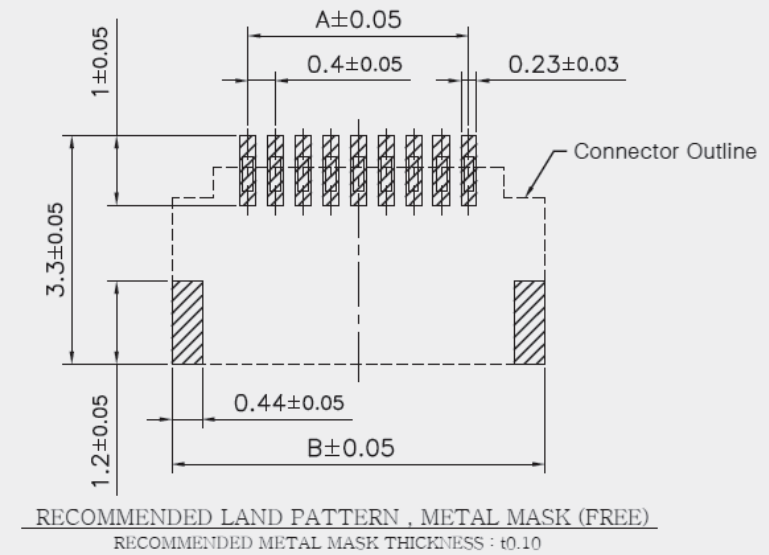
Note 2 : This connector has no polarity.

FPC Connector 0409

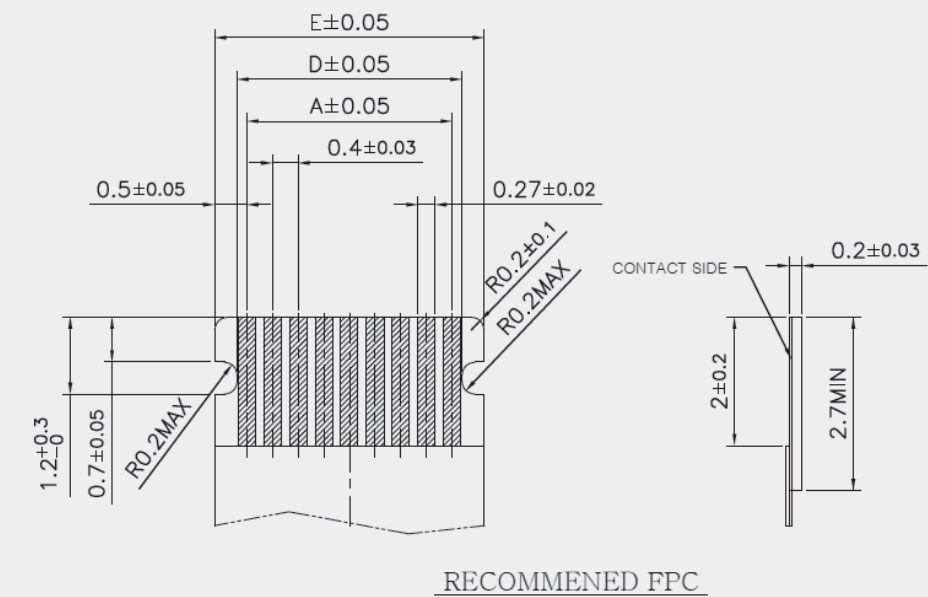
Mobile Connector

PF040-B09B-C09

Recommended PCB Layout, Metal Mask dimensions



Recommended FPC Dimensions



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
PF040-B09B-C09	9	3.20	5.40	4.25	5.03	4.20

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

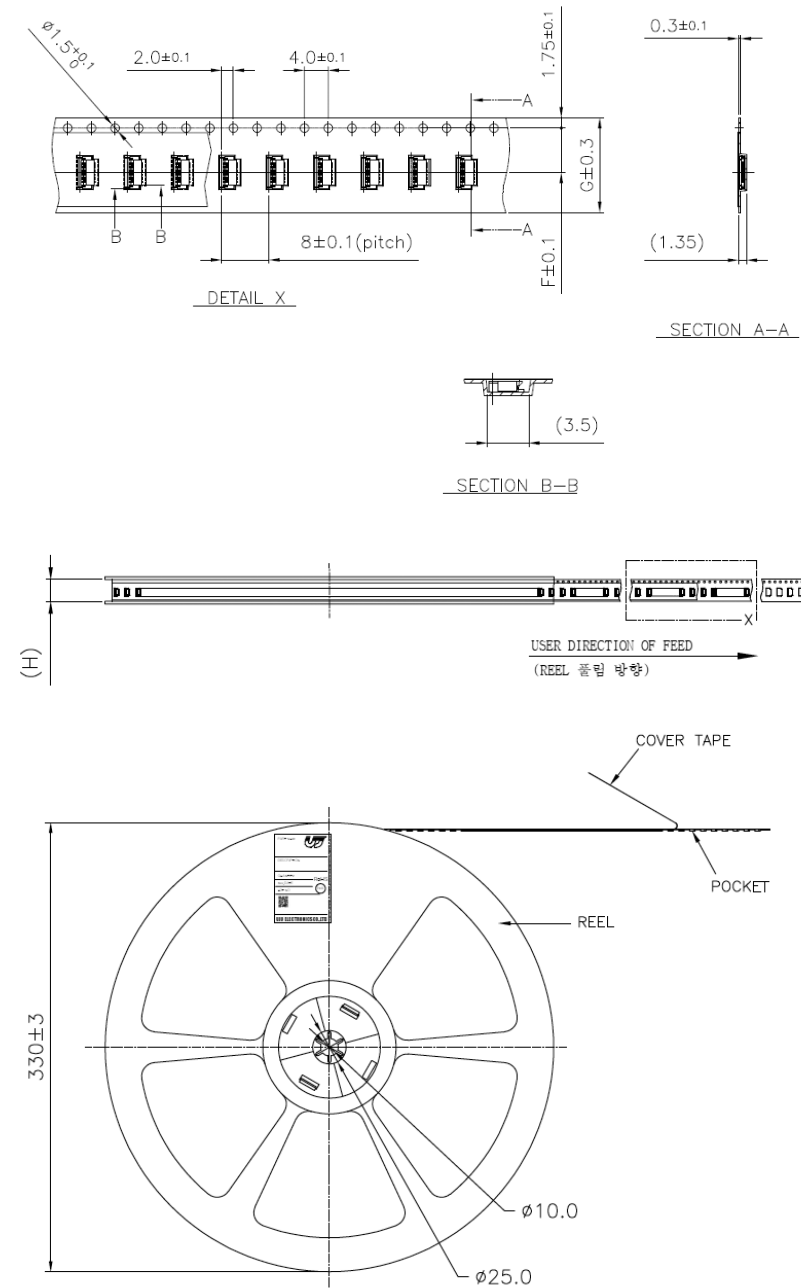
Note 2 : This connector has no polarity.

FPC Connector 0409

Mobile Connector

PF040-B09B-C09

Packing Drawing



Unit : mm

Product No.	No. of Contacts	F	G	H
PF040-B09B-C09	9	7.5	1.6	17.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

FPC Connector 007A

Mobile Connector

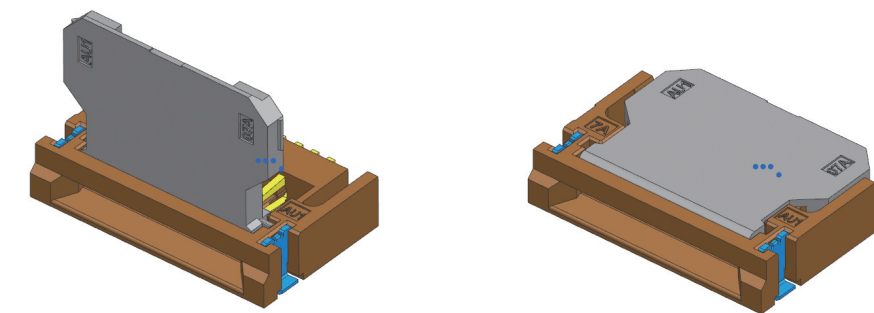
PF050-B07B-C15-B

Applications

- ▶ Smart phone
- ▶ Wearable devices
- ▶ Potable devices

Characteristics

- ▶ Back-flip mechanism
- ▶ FPC Cable lock
- ▶ Capable of high current



- ▶ 0.50mm Pitch, 1.50mm Height, compact design
- ▶ Easy to Insert FPC and operate Actuator Back-lock system
- ▶ High FPC Retention force with Actuator locking boss
- ▶ Capable of High Current up to 1A with Contact Terminal
- ▶ Applicable for FPC thickness is 0.3 ± 0.03 mm

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
1.0A Max.	50mΩ [Max.]	200V AC[RMS]	-35°C ~ 85°C

Mating Size & Product No.

Pin	Pitch	Width	Height	Lenght	Product No.
7	0.50	5.30	1.50	7.30	PF050-B07B-C15-B

FPC Connector 007A

Mobile Connector

PF050-B07B-C15-B

Product Specification

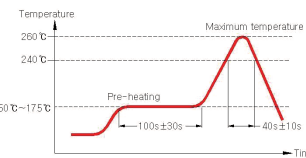
Ratings	Rated current	1.0A Max.	Operating temperature range	-35°C to +85°C 1	Storage temperature range	15°C ~ 35°C
	Rated voltage	50V AC(RMS)/DC	Operating humidity range	70%RH 2)	Storage humidity range	65%RH Max. 2)

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC Specification : T=0.30±0.03mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	50mΩ Max.	Closed circuit Current : 1mA. Open circuit voltage : 20mV Max.
2. Insulation resistance	1,000MΩ Min.	Test voltage : 500V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	200V AC for 1minute
4. FPC retention force	0.5kgf Min.	Pull the FPC from a connector at a speed of 25mm/min and measured extraction force.
5. Durability	Contact resistance : 100mΩ Max.	Repeated insertion and separation cycles of Max. 30 times
6. Vibration	1) Discontinuity : 1μs Max. 2) No damage, loose part nor crack 3) Contact resistance : 100mΩ Max	- Frequency : 10-55-10Hz/Min. - Peak amplitude : 1.5mm - Test current : DC 100mA - Test direction : 3 axial (X,Y,Z) - Duration : 2h each (6h in total)
7. Shock	1) Discontinuity : 1μs Max. 2) No damage, loose part nor crack	- Peak acceleration : 490m/s ² (50G) - Half sine wave : (Duration : 11ms) - Direction : 3direction (X,Y,Z) - Number : 3times per each direction - Test current : 100mA
8. Humidity	1) Contact resistance : 100mΩ Max. 2) No damage, loose part nor Crack 3) Insulation Resistance : 100MΩ Min.	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.	Reflow : Refer to the recommended reflow condition.



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Natural	UL94V-0
Actuator	LCP	Black	UL94V-0
Contact Terminal	Copper Alloy	Au over Nickel	-
Signal Pin	Copper Alloy	Au over Nickel	-
Fitting Nail	Brass	Sn over Nickel	-

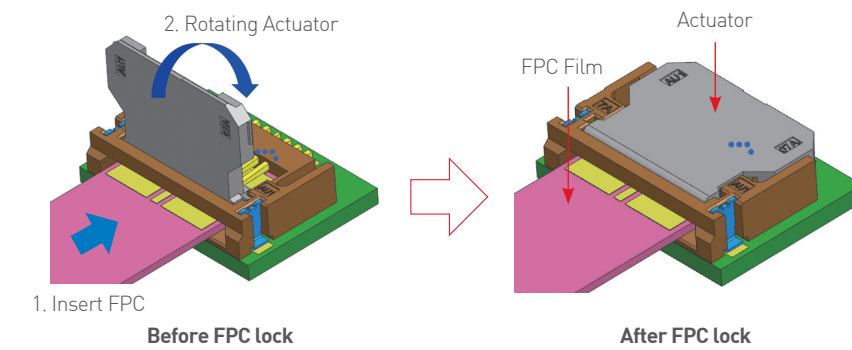
FPC Connector 007A

Mobile Connector

PF050-B07B-C15-B

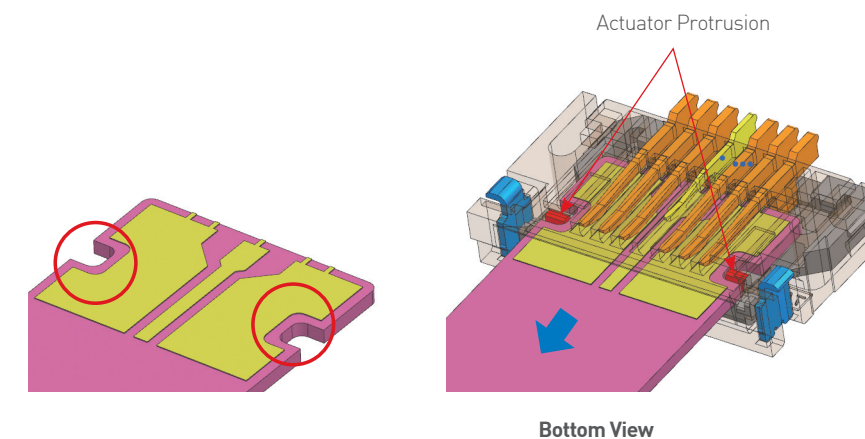
FEATURES AND ADVANTAGES

- Easy to Insert FPC and operate to Actuator back lock.
Actuator rotating opposite direction against FPC insertion. (Back flip)



► FPC side Locking structure design

When forcibly taking out FPC, Protrusion Locker help Increasing retention of FPC



FPC Connector 007A

Mobile Connector

PF050-B07B-C15-B

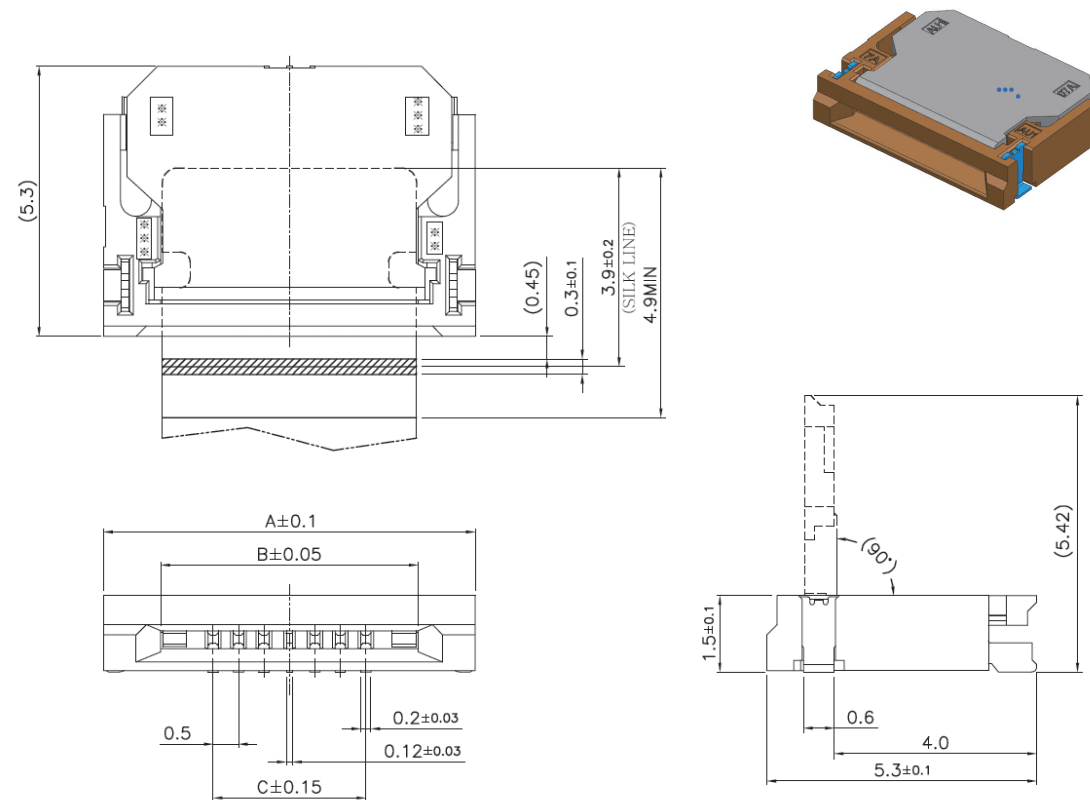
Product Number Structure

P **F** **050** - **B** **07** **B** - **C** **15** - **B**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : FPC
- ② Style : FLIP
- ③ Contact Pitch : 0.50mm
- ④ Type : Back Flip
- ⑤ No. of position : 7P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : Fitting Nail
- ⑧ Connector Height : 1.5mm
- ⑨ Option

Product Drawing



Unit : mm

Product No.	No. of Contacts	A	B	C
PF050-B07B-C15-B	7	7.30	5.06	3.00

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

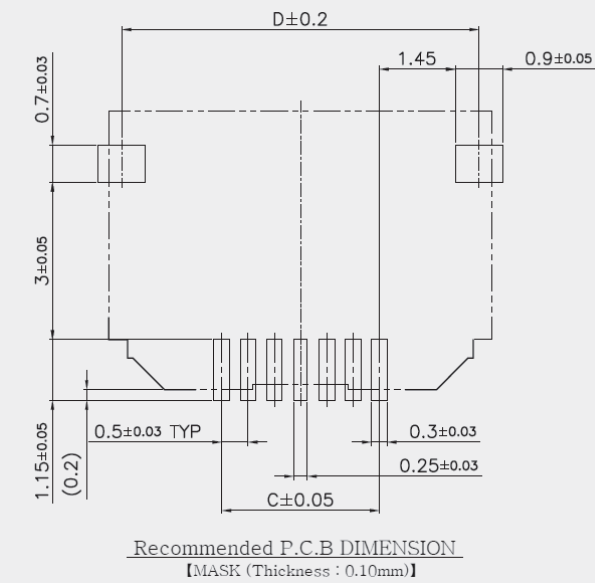
Note 2 : This connector has no polarity.

FPC Connector 007A

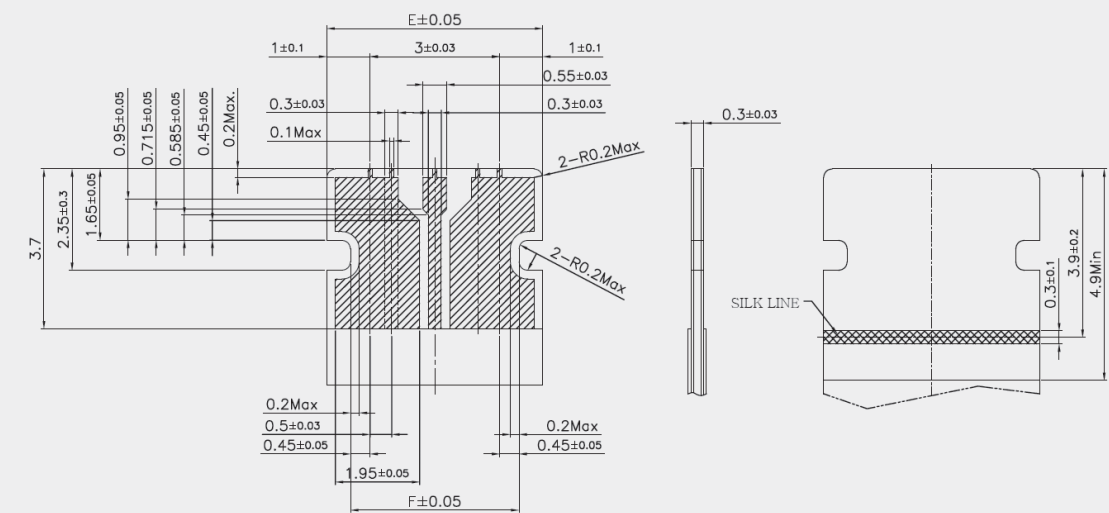
Mobile Connector

PF050-B07B-C15-B

Recommended PCB Layout, Metal Mask dimensions



Recommended FPC Dimensions



Unit : mm

Product No.	No. of Contacts	C	D	E	F
PF050-B07B-C15-B	7	3.00	6.80	5.00	3.90

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

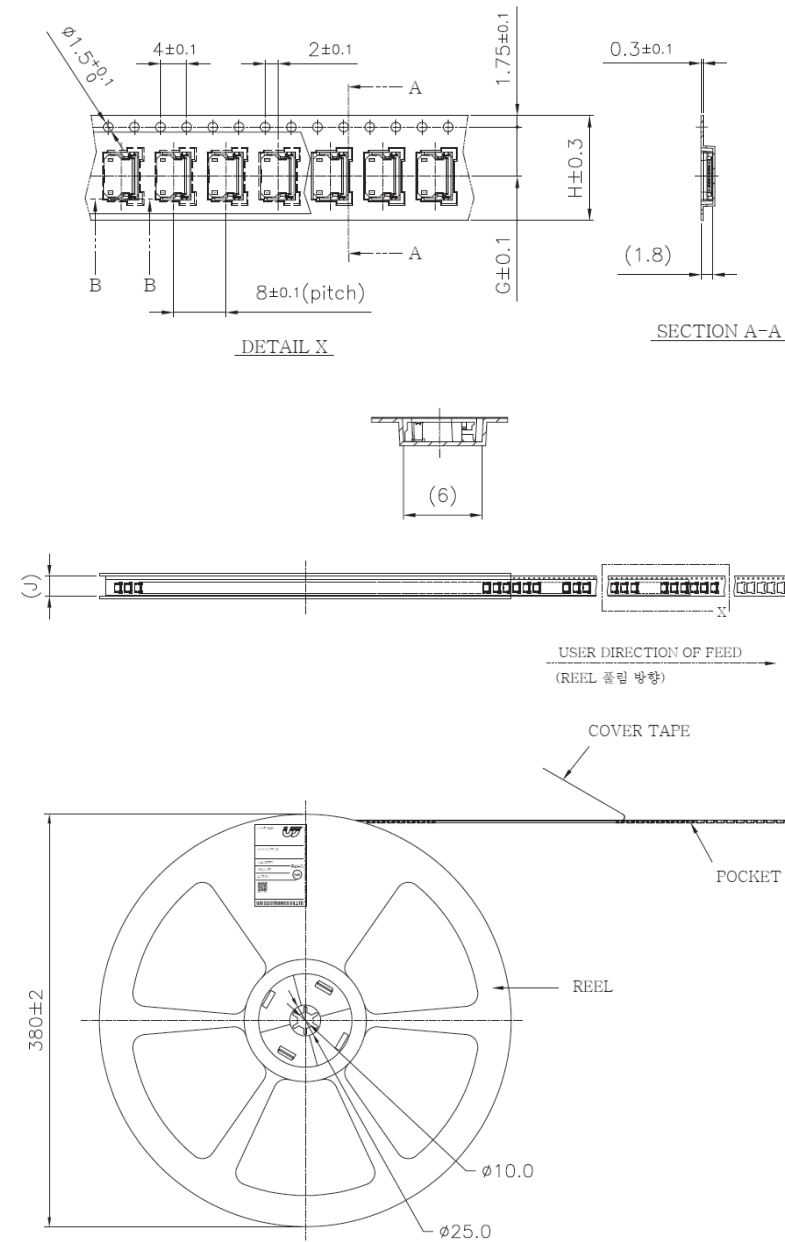
Note 2 : This connector has no polarity.

FPC Connector 007A

Mobile Connector

PF050-B07B-C15-B

Packing Drawing



Unit : mm

Product No.	No. of Contacts	G	H	J
PF050-B07B-C15-B	7	7.5	16.0	17.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

FPC Connector NAMU

Mobile Connector

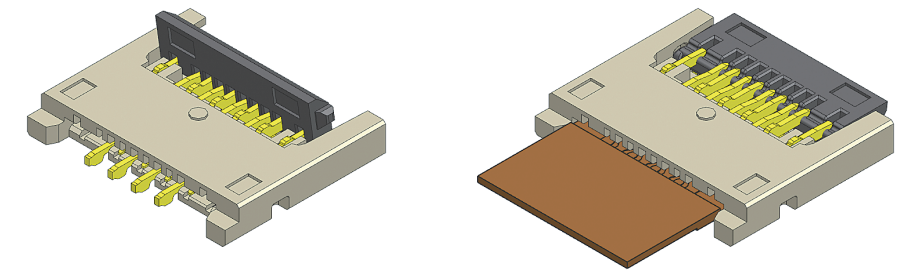
PF025-B08B-N07 | PF025-B12B-N07 | PF025-B14B-N07 | PF025-B35B-N07

Applications

- ▶ Smart phone
- ▶ Wearable devices
- ▶ Potable devices

Characteristics

- ▶ Ultra-low profile
- ▶ Space-saving design
- ▶ Back-flip mechanism
- ▶ FPC Cable lock



- ▶ 0.25mm Pitch, 0.66mm Height, Ultra narrow and compact design
- ▶ Easy to Insert FPC and operate Actuator Back-lock system
- ▶ High FPC Retention force with both Locking Terminal
- ▶ Applicable for FPC thickness is 0.12 ± 0.015 mm

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
Signal 0.2A Max.	80mΩ (Max.)	200V AC[RMS]	-35°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	CODE
8	0.25	3.8	0.66	4.25	PF025-B08B-N07
12				5.25	PF025-B12B-N07
14				5.75	PF025-B14B-N07
35				11.0	PF025-B35B-N07

FPC Connector **NAMU**

Mobile Connector

PF025-B08B-N07 | PF025-B12B-N07 | PF025-B14B-N07 | PF025-B35B-N07

Product Specification

Ratings	Rated current	0.2A Max	Operating temperature range	-35°C to +85°C 1)	Storage temperature range	+15°C to +35°C
	Rated voltage	50V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

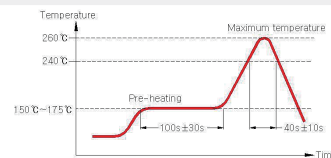
2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC Specification T=0.12±0.015mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	80mΩ Max. / contact	Closed circuit Current : 500μA Open circuit voltage : 20mV Max.
2. Insulation resistance	50MΩ Min.	Test voltage : 250V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 200V for 1minute
4. Actuator operation forces	(0.15 x contacts) kgf Max.	Push the Actuator Open/ Close direction at a speed of 25mm/min and measured Actuator operation force.
5. FPC retention force	Number of contact ≤ 20pins : 0.40kgf Min. Number of contact ≥ 21pins : 0.51kgf Min.	Pull the FPC from a connector at a speed of 25mm/min and measured extraction force.
6. Durability	No damage or mechanical defect Contact resistance : 80mΩ Max. / contact	Number of cycles : 10 cycles.
7. Vibration	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out Contact resistance : 80mΩ Max. / contact	Amplitude: 1.5mm Acceleration: 15%g Frequency: 10~500Hz Duration : X,Y,Z axis each 30minutes..
8. Shock	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out	On concrete : 1.8m Height, six axis 3 times, 150g total weight On tile : 0.1m Height, XYZ axis 3,500 times, 150g total weight
9. Humidity	No damage or mechanical defect Contact resistance : 80mΩ Max. / contact Insulation Resistance : 50MΩ Min.	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	No damage or mechanical defect Contact resistance : 80mΩ Max. / contact Insulation Resistance : 50MΩ Min.	Temperature : 25-65-25-65-25--10-25°C Humidity : 90% ~ 95% 5 cycles

11. Solder heat resistance
Visual inspection : Connector shall meet the design and dimensional requirement3. s of each drawings.

Reflow condition.
(Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Natural Color	UL94V-0
Actuator	PPS	Black	UL94V-0
Contact Terminal A	Phosphor Bronze	Au over Nickel	-
Contact Terminal B	Phosphor Bronze	Au over Nickel	-
Locking Terminal	Phosphor Bronze	Au over Nickel	-

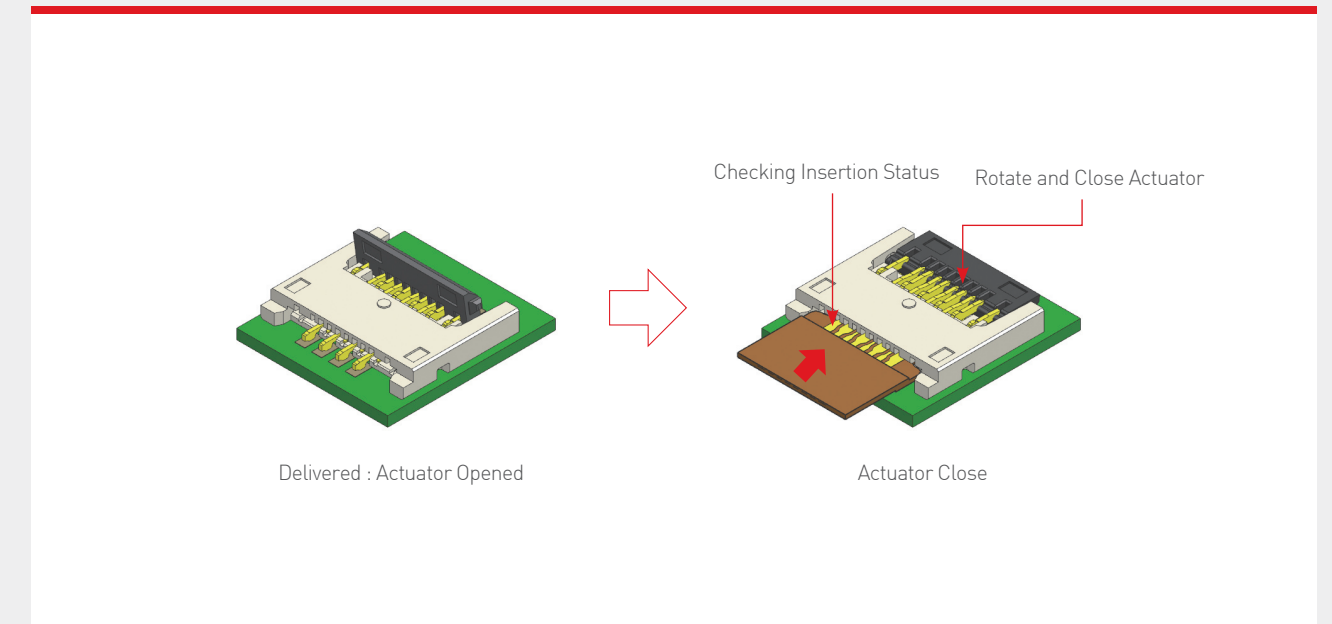
FPC Connector **NAMU**

Mobile Connector

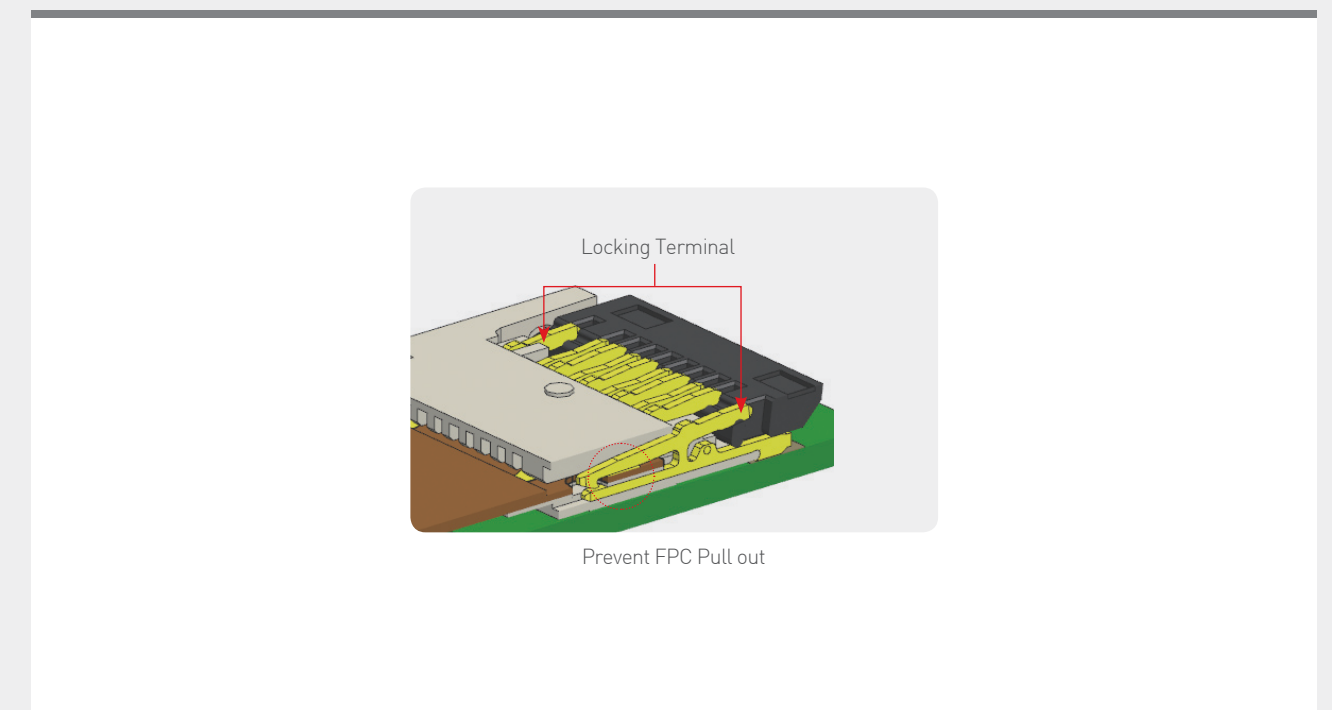
PF025-B08B-N07 | PF025-B12B-N07 | PF025-B14B-N07 | PF025-B35B-N07

FEATURES AND ADVANTAGES

- ▶ **Easy to Insert FPC and operate Actuator close**
Both Upper and Lower contact, Back Lock System



- ▶ **High FPC Retention Force**
Both Locking Terminal is holding FPC



FPC Connector **NAMU**

Mobile Connector

PF025-B08B-N07 | PF025-B12B-N07 | PF025-B14B-N07 | PF025-B35B-N07

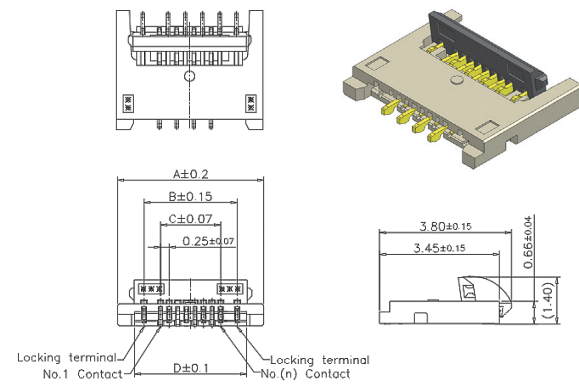
Product Number Structure

P **F** **025** - **B** **xx** **B** - **N** **07**

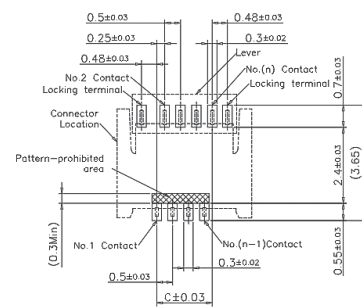
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : FPC
- ② Style : FLIP
- ③ Contact Pitch : 0.175mm
- ④ Type : Back Flip
- ⑤ No. of position : 8p, 12p, 14p, 35p
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : None
- ⑧ Connector Height : 0.65mm

Product Drawing



Recommended PCB, Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D
PF025-B08B-N07	8	4.25	2.71	1.75	3.26
PF025-B12B-N07	12	5.25	3.71	2.75	4.26
PF025-B14B-N07	14	5.75	4.21	3.25	4.76
PF025-B35B-N07	35	11.0	9.46	8.5	10.01

Note 1 : Please place orders in full reel quantities. (1Reel = 4,000ea)

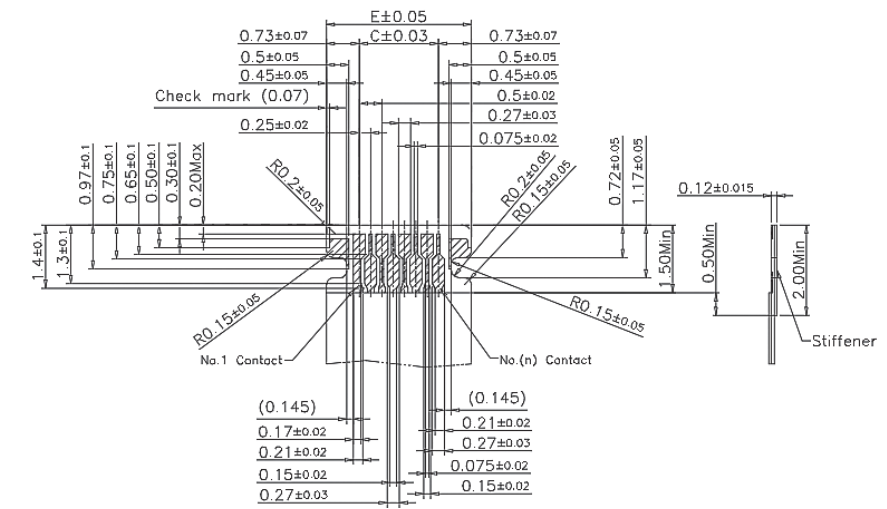
Note 2 : This connector has no polarity.

FPC Connector **NAMU**

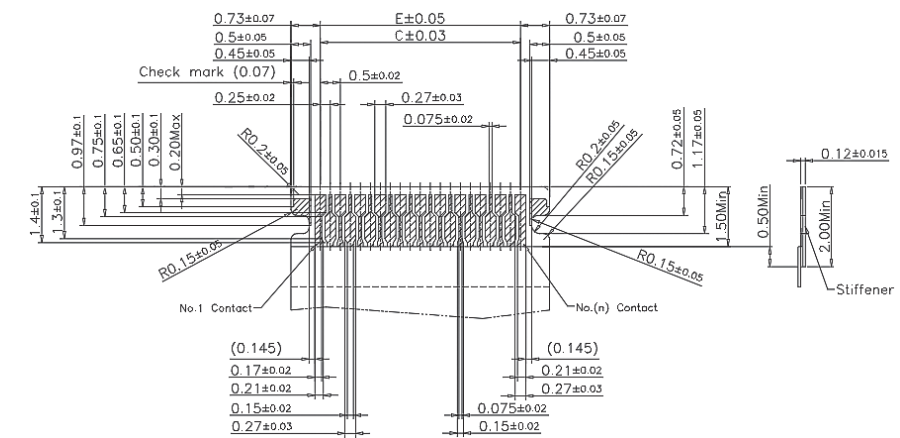
Mobile Connector

PF025-B08B-N07 | PF025-B12B-N07 | PF025-B14B-N07 | PF025-B35B-N07

Recommended FPC Dimensions



[Applicable for the Even number contacts]



[Applicable for the Even number contacts]

Unit : mm

Product No.	No. of Contacts	C	E
PF025-B08B-N07	8	1.75	3.21
PF025-B12B-N07	12	2.75	4.21
PF025-B14B-N07	14	3.25	4.71
PF025-B35B-N07	35	8.5	9.96

Note 1 : Please place orders in full reel quantities. (1Reel = 4,000ea)

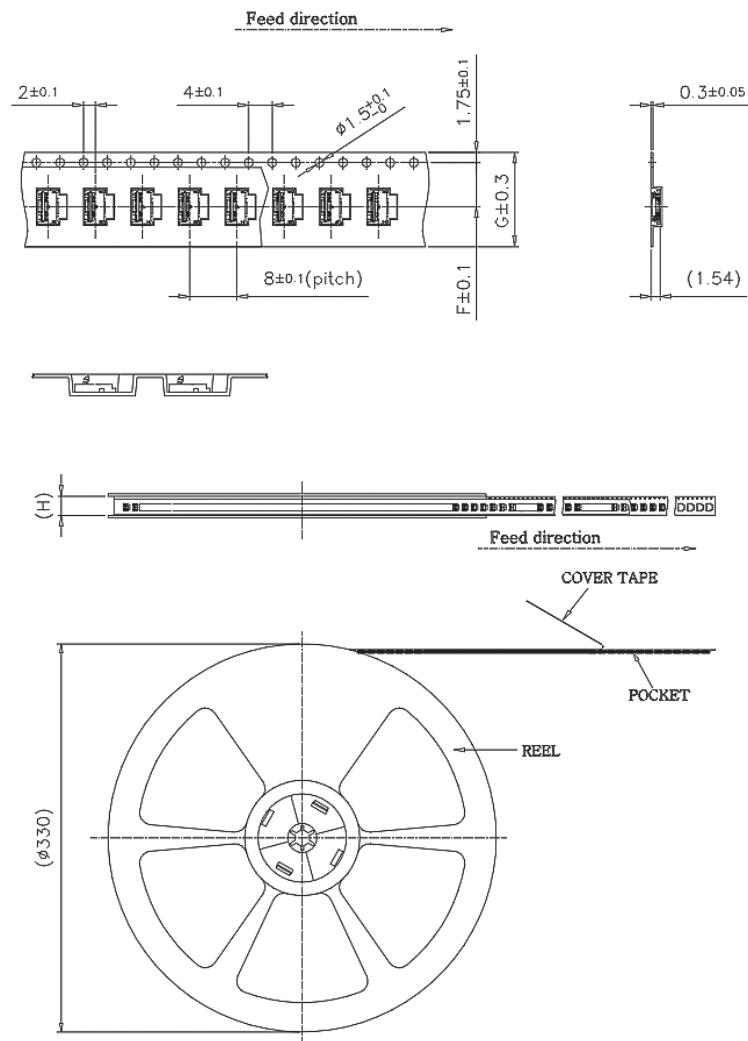
Note 2 : This connector has no polarity.

FPC Connector **NAMU**

Mobile Connector

PF025-B08B-N07 | PF025-B12B-N07 | PF025-B14B-N07 | PF025-B35B-N07

Packing Drawing



Unit : mm

Product No.	No. of Contacts	F	G	H
PF025-B08B-N07	8	7.5	16.0	17.4
PF025-B12B-N07	12	7.5	16.0	17.4
PF025-B14B-N07	14	7.5	16.0	17.4
PF025-B35B-N07	35	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 4,000ea)

Note 2 : This connector has no polarity.

FPC Connector **FJ**

Mobile Connector

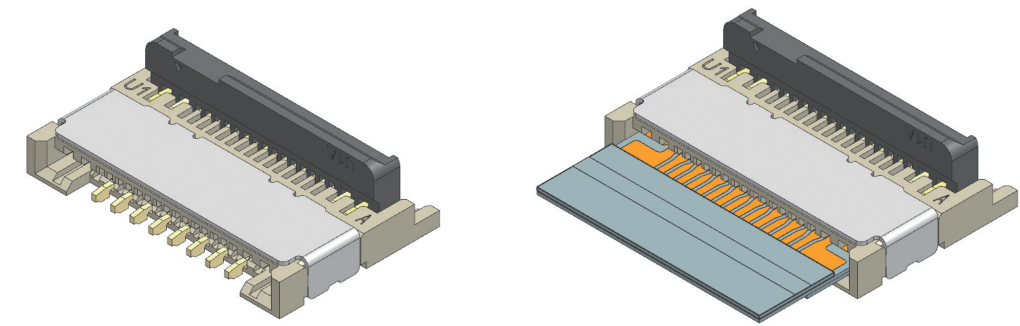
PF018-B17B-N07

Applications

- ▶ Smart phone
- ▶ Wearable devices
- ▶ Potable devices

Characteristics

- ▶ Ultra-low profile
- ▶ Space-saving design
- ▶ Back-flip mechanism
- ▶ FPC Cable lock
- ▶ Capable of high current



- ▶ 0.175mm Pitch, 0.65mm Height, Ultra narrow and compact design
- ▶ Easy to Insert FPC and operate Actuator Back-lock system
- ▶ High FPC Retention force with both Locking Terminal
- ▶ Capable of High Current up to 1A with Both Power Terminal
- ▶ Enhanced strength of damage by applying the shell cover
- ▶ Applicable for FPC thickness is 0.12±0.02mm

Specifications

Rated Current	Contact Resistance	Dielectric Strength	Temperature Range
Signal 0.2A [Max.] Power 1.0A [Max.]	200mΩ Max.	200V AC[RMS]	-35°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	CODE
17	0.175	3.2	0.65	4.66	PF018-B17B-N07

FPC Connector **FJ**

Mobile Connector

PF018-B17B-N07

Product Specification

Ratings	Rated current	0.2A Max. [Signal] 1.0A Max [Power]	Operating temperature range	-35°C to +85°C 1)	Storage temperature range	+15°C to +35°C
	Rated voltage	50V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

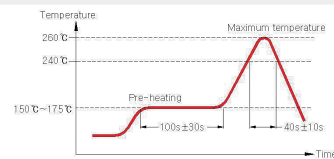
- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC Specification T=0.12±0.02mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	200mΩ Max. / contact	Closed circuit Current : 500μA Open circuit voltage : 20mV Max.
2. Insulation resistance	50MΩ Min.	Test voltage : 250V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 200V for 1minute
4. Actuator operation forces	0.8kgf Max.	Push the Actuator Open/ Close direction at a speed of 25mm/min and measured Actuator operation force.
5. FPC retention force	0.5kgf Min.	Pull the FPC from a connector at a speed of 25mm/min and measured extraction force.
6. Durability	No damage or mechanical defect Contact resistance : 200mΩ Max. / contact	Number of cycles : 10 cycles.
7. Vibration	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out Contact resistance : 200mΩ Max. / contact	Amplitude: 1.5mm Acceleration: 15%g Frequency: 10-55-10Hz Duration : X,Y,Z axis each 30minutes..
8. Shock	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out	On concrete : 1.8m Height, six axis 3 times, 150g total weight On tile : 0.1m Height, XYZ axis 3,500 times, 150g total weight
9. Humidity	No damage or mechanical defect Contact resistance : 200mΩ Max. / contact Insulation Resistance : 50MΩ Min.	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	No damage or mechanical defect Contact resistance : 200mΩ Max. / contact Insulation Resistance : 50MΩ Min.	Temperature : 25-65-25-65-25--10-25°C Humidity : 90% ~ 95% 5 cycles

- 11. Solder heat resistance
Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.

Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Natural Color	UL94V-0
Actuator	PA	Black	UL94V-0
Contact Terminal A	Phosphor Bronze	Au over Nickel	-
Contact Terminal B	Phosphor Bronze	Au over Nickel	-
Power Terminal	Copper Alloy	Au over Nickel	-
Locking Terminal	Phosphor Bronze	Au over Nickel	-
Shell Cover	Phosphor Bronze	Au over Nickel	-

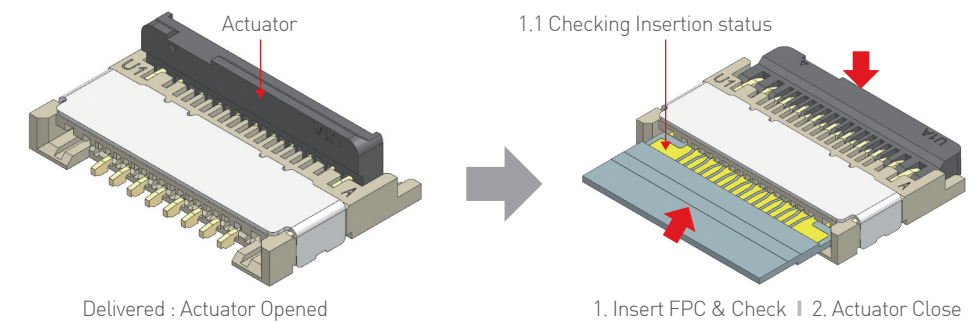
FPC Connector **FJ**

Mobile Connector

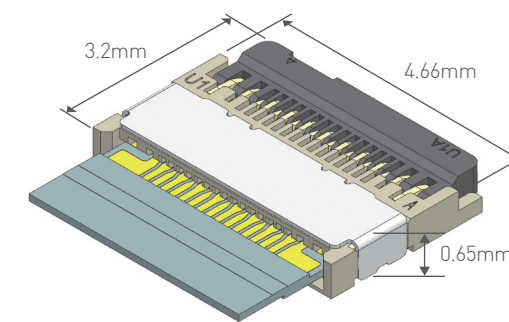
PF018-B17B-N07

FEATURES AND ADVANTAGES

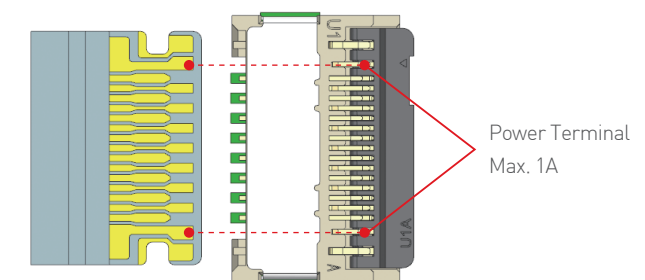
- Easy to Insert FPC and operate Actuator close
Upper contact, Back Lock System



- Ultra-low profile & Space-saving
0.175 mm Pitch, 0.65mm Height



- Capable of High Current
Both Power Terminals can allow current to 1A



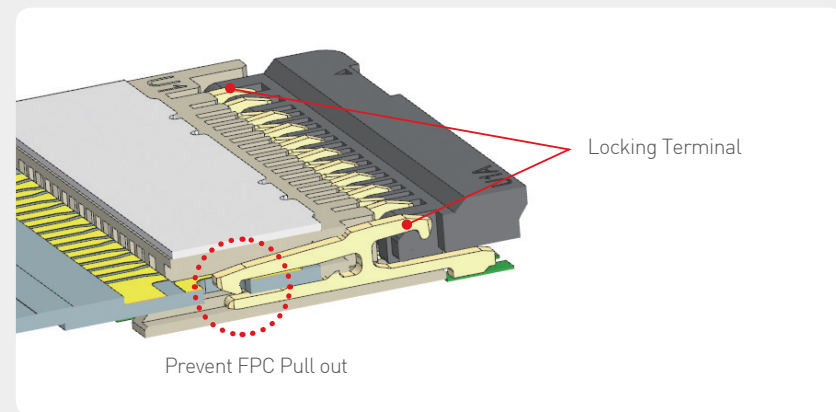
FPC Connector **FJ**

Mobile Connector

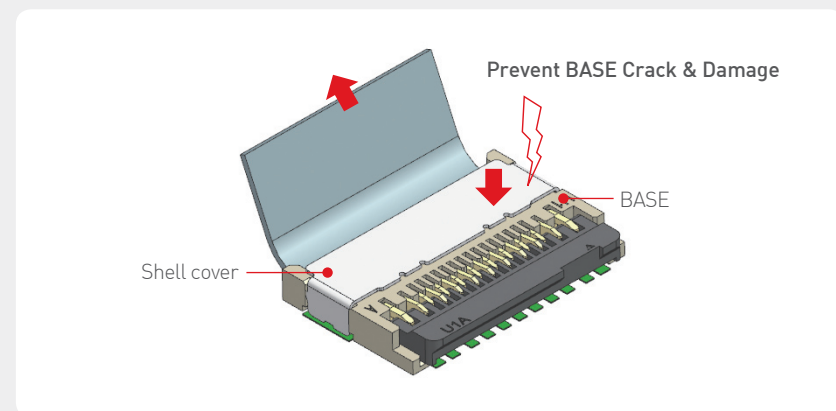
PF018-B17B-N07

FEATURES AND ADVANTAGES

- ▶ **High FPC Retention Force**
Both Locking Terminal is holding FPC



- ▶ **Design to strengthen against damagee**
Reinforced Shell Cover Prevents the Base is Damaged



FPC Connector **FJ**

Mobile Connector

PF018-B17B-N07

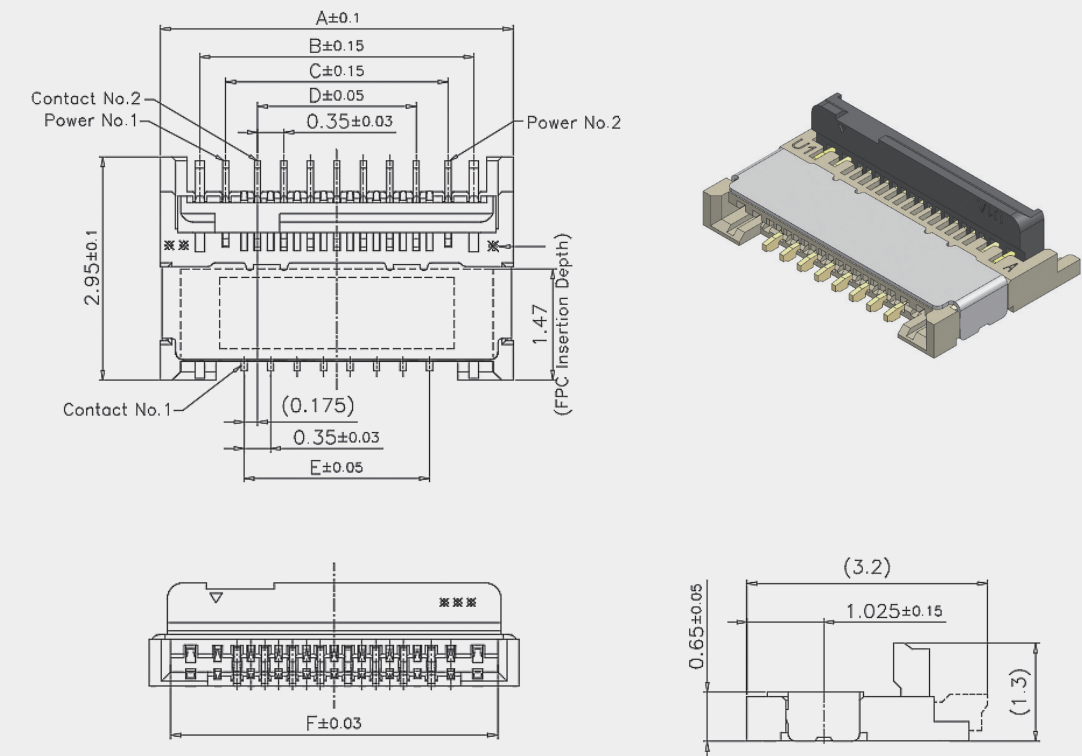
Product Number Structure

P F 018 - B 17 B - N 07

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Type of connectors : FPC	② Style : FLIP
③ Contact Pitch : 0.175mm	④ Type : Back Flip
⑤ No. of position : 17p	⑥ Test of on board : Board on
⑦ Shape symbol : None	⑧ Connector Height : 0.65mm

Product Drawing



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E	F
PF018-B17B-N7	17	4.66	3.62	2.94	2.1	2.45	4.13

Note 1 : Please place orders in full reel quantities. (1Reel = 4,000ea)

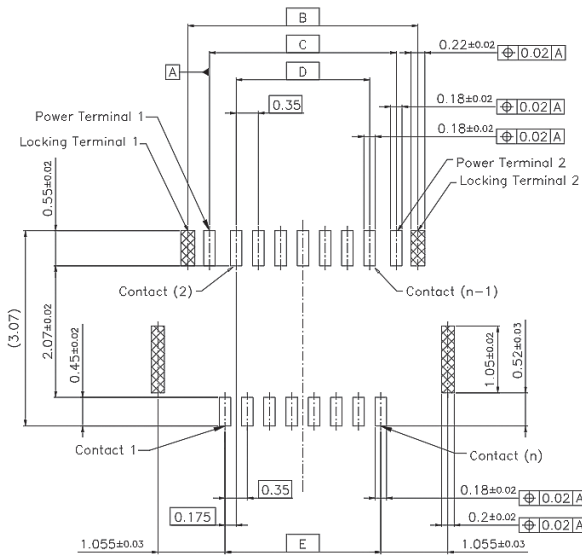
Note 2 : This connector has no polarity.

FPC Connector **FJ**

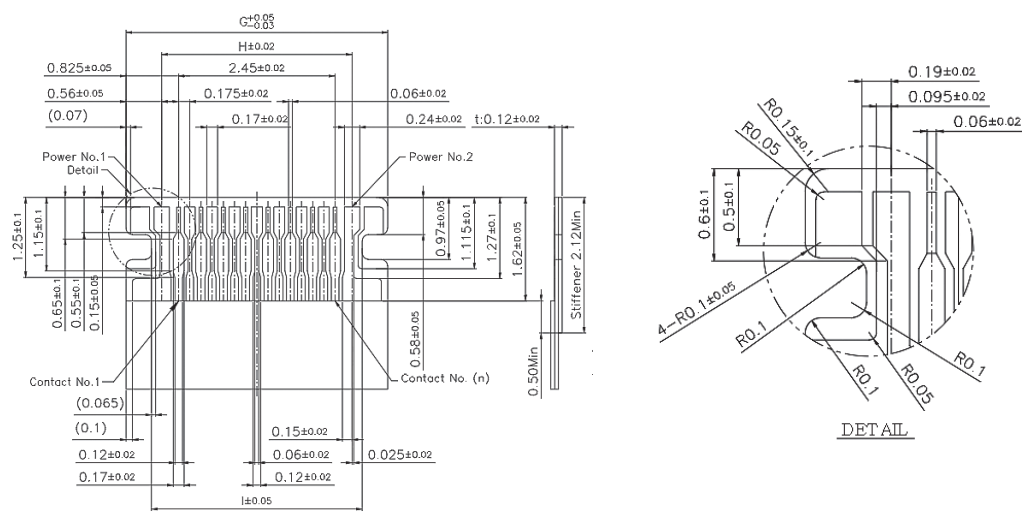
Mobile Connector

PF018-B17B-N07

Recommended PCB , Metal Mask Layout



Recommended FPC Dimensions



Unit : mm

Product No.	No. of Contacts	B	C	D	E	G	H	I
PF018-B17B-N7	17	3.62	2.94	2.1	2.45	4.1	2.98	3.3

Note 1 : Please place orders in full reel quantities. (1Reel = 4,000ea)

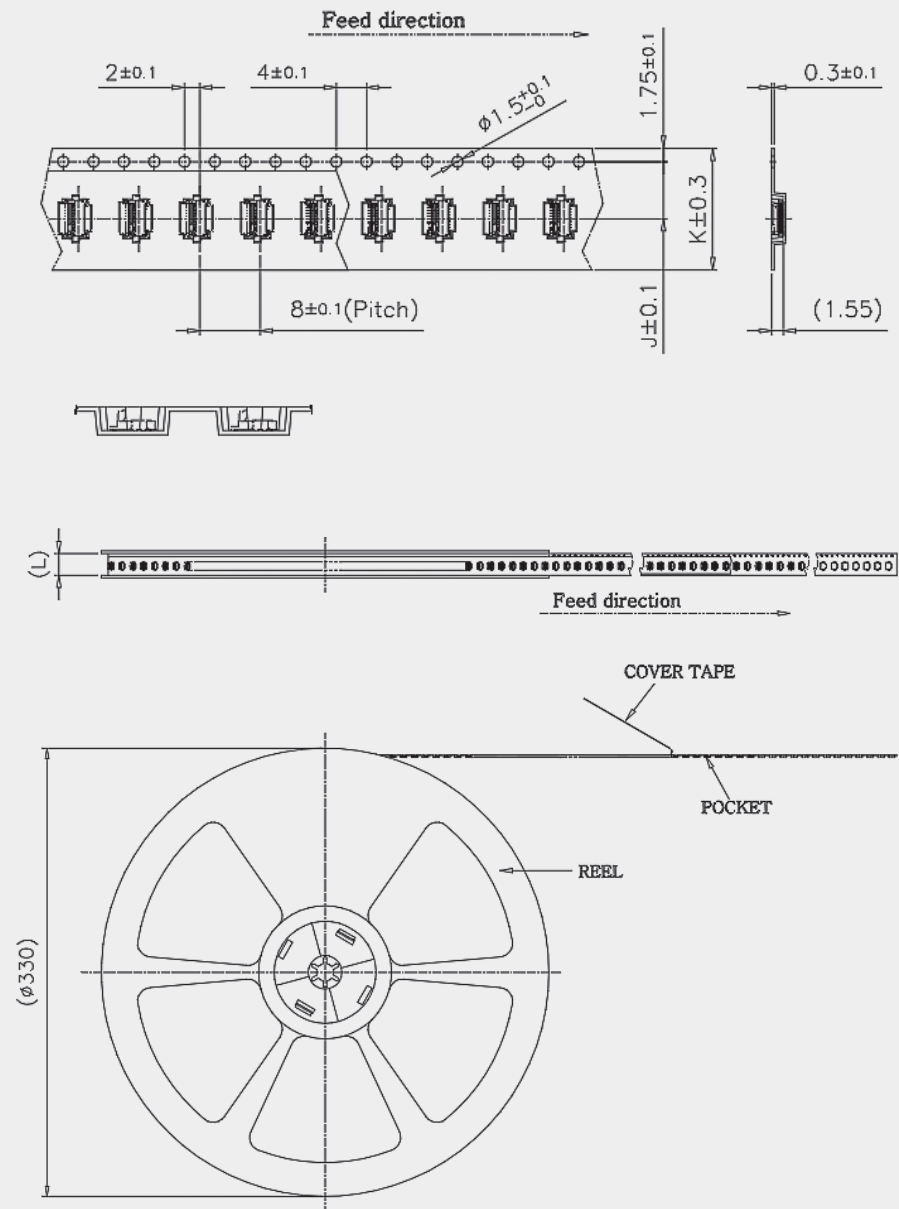
Note 2 : This connector has no polarity.

FPC Connector **FJ**

Mobile Connector

PF018-B17B-N07

Packing Drawing



Unit : mm

Product Code	No. of Contacts	J	K	L
PF018-B17B-N7	17	16.0	7.5	17.4

Note 1 : Please place orders in full reel quantities. (1Reel = 4,000ea)

Note 2 : This connector has no polarity.

FPC Connector **FFC 1.0 H5.5**

Mobile Connector

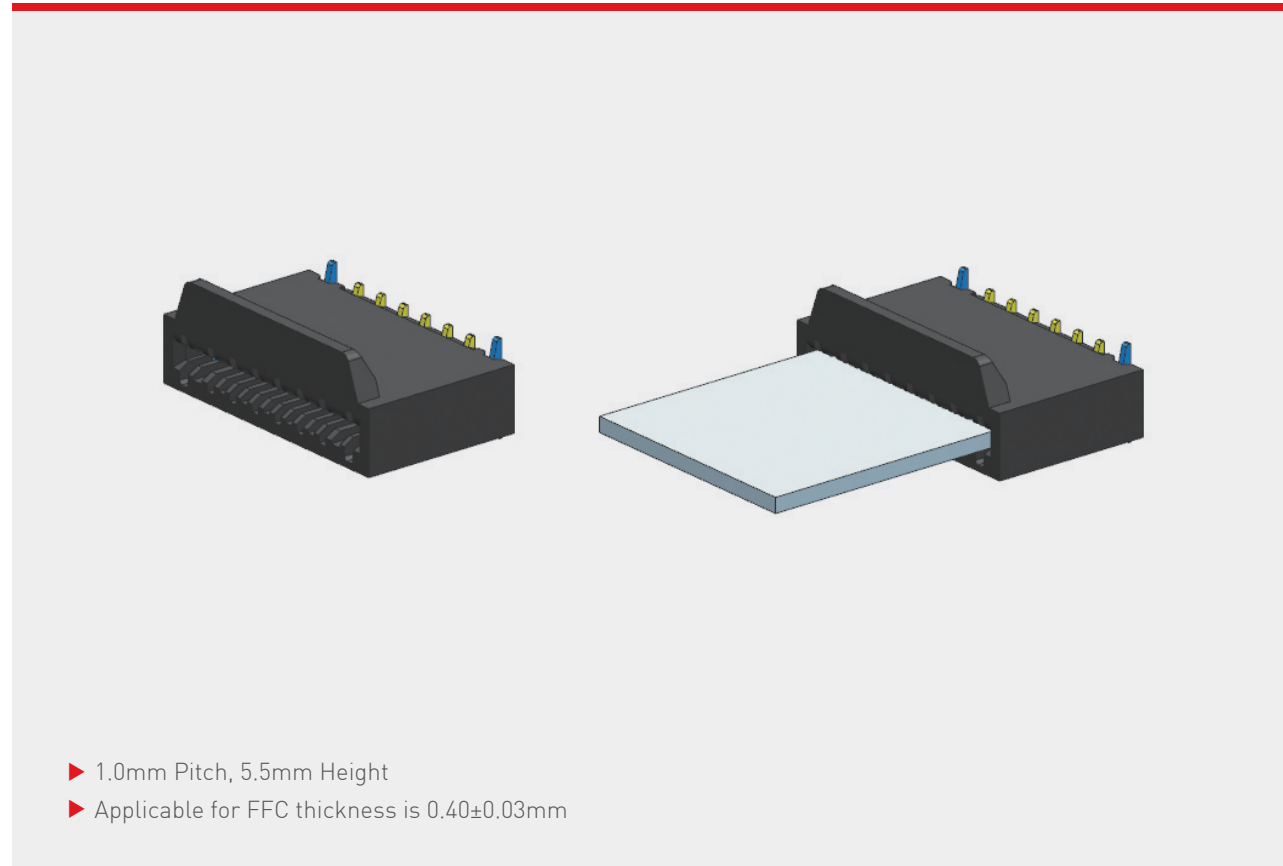
FN100-Z06B-C55 | FN100-Z08B-C55

Applications

- ▶ Electronic equipment
- ▶ Video equipment

Characteristics

- ▶ Non-ZIF design
- ▶ Vertical mount type



- ▶ 1.0mm Pitch, 5.5mm Height
- ▶ Applicable for FFC thickness is 0.40±0.03mm

Specifications

Rated Current	Contact Resistance	Dielectric Strength	Temperature Range
1.0A Max.	30mΩ Max.	AC 150V	-35°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	CODE
6	1.0	3.45	5.5	9.2	FN100-Z06B-C55
8	1.0	3.45	5.5	11.2	FN100-Z08B-C55

FPC Connector **FFC 1.0 H5.5**

Mobile Connector

FN100-Z06B-C55 | FN100-Z08B-C55

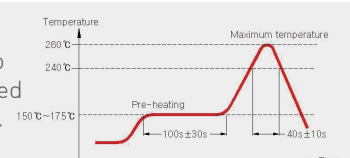
Product Specification

Ratings	Rated current	1.0A Max. / contact	Operating temperature range	-35°C to +85°C 1)	Storage temperature range	15°C ~ 35°C
	Rated voltage	150V AC, DC	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Applicable FFC Specification : T=0.4±0.03mm

Items	Specifications	Conditions
1. Contact resistance	30mΩ Max. / contact	Closed circuit Current : 10mA. Open circuit voltage : 20mV
2. Insulation resistance	500MΩ Min.	Test voltage : 500V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	DC 500V for 5sec
4. Insertion force	0.4Kgf Max. / pin	FFC shall be insert at a speed of 25mm/min and measured the insertion force.
5. Durability	No damage or mechanical defect Contact resistance : 50mΩ Max. / contact	Number of cycles : 30 cycles.
6. Vibration	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out Contact resistance : 50mΩ Max. / contact	Amplitude: 1.5mm Frequency: 10~55~10Hz Duration : X,Y,Z axis each 2 hours.
7. Humidity	No damage or mechanical defect Contact resistance : 50mΩ Max. / contact Insulation Resistance : 50MΩ Min.	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
8. Solder heat resistance	Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.	Reflow : Refer to the recommended reflow condition. 

Materials / Finish

Part	Materials	Finish	UL Regulation
Base Insulation	PA4T	Black	UL94V-0
Contact Terminal	Phosphor Bronze	Sn over Nickel	-
Fitting Nail	Phosphor Bronze	Sn over Nickel	-

FPC Connector FFC 1.0 H5.5

Mobile Connector

FN100-Z06B-C55 | FN100-Z08B-C55

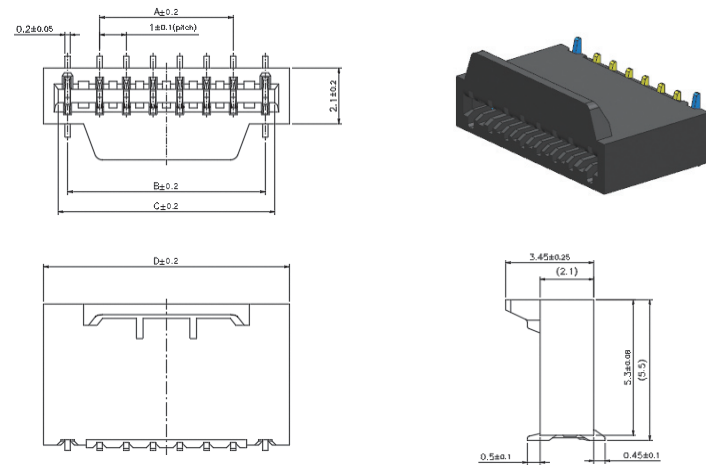
Product Number Structure

F **N** **100** - **Z** **xx** **B** - **C** **55**

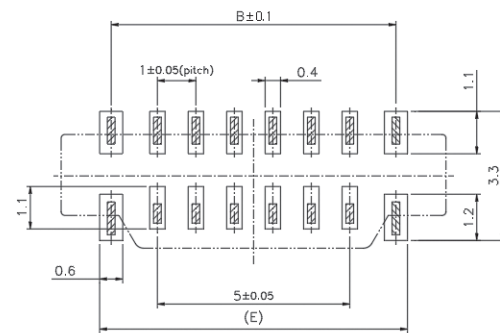
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : FFC
- ② Style : Non-FLIP
- ③ Contact Pitch : 1.0mm
- ④ Type : Non-ZIF
- ⑤ No. of position : 6p, 8p
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With locker
- ⑧ Connector Height : 5.5mm

Product Drawing



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
FN100-Z06B-C55	6	5.0	7.4	8.1	9.2	8.0
FN100-Z08B-C55	8	7.0	9.4	10.1	11.2	10.0

Note 1 : Please place orders in full reel quantities. (1Reel = 2,000ea)

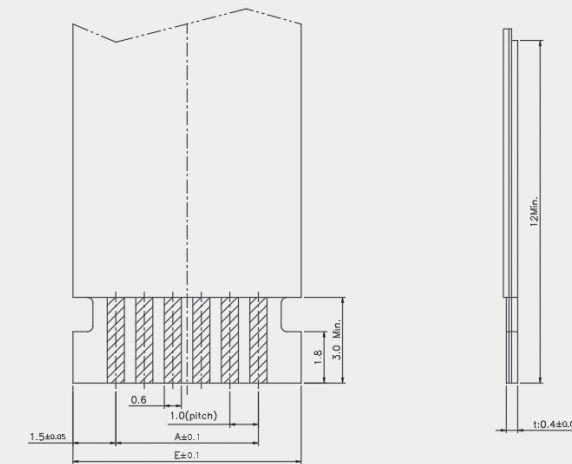
Note 2 : This connector has no polarity.

FPC Connector FFC 1.0 H5.5

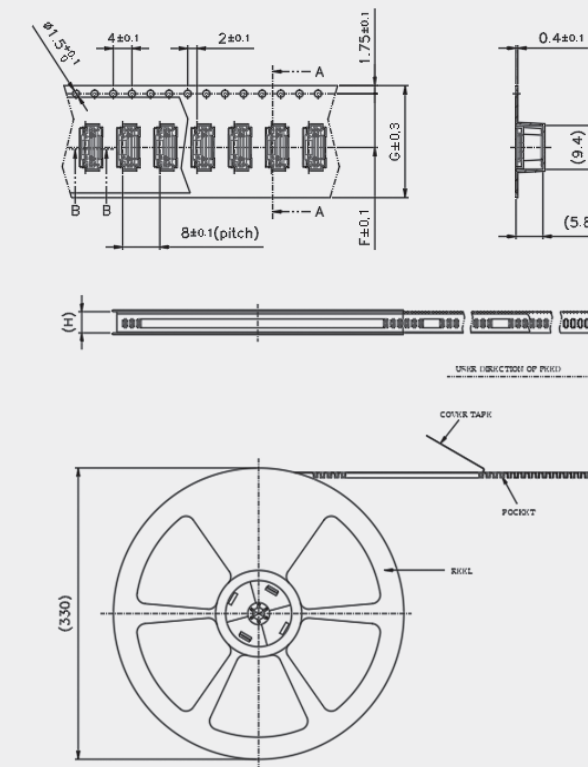
Mobile Connector

FN100-Z06B-C55 | FN100-Z08B-C55

Recommended FPC Dimensions



Packing Drawing



Unit : mm

Product No.	No. of Contacts	A	E	F	G	H
FN100-Z06B-C55	6	5.0	8.0	11.5	24.0	25.4
FN100-Z08B-C55	8	7.0	10.0	11.5	24.0	25.4

Note 1 : Please place orders in full reel quantities. (1Reel = 2,000ea)

Note 2 : This connector has no polarity.

FPC/FFC Connector FPC 0.5 Narrow

Mobile Connector

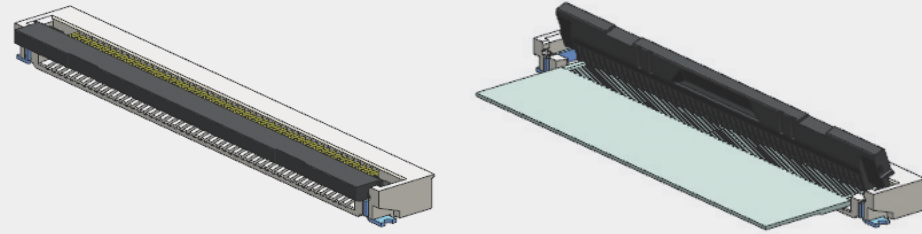
PF050-L30B-C21 | PF050-L40B-C21 | PF050-L60B-C21

Applications

- ▶ Electronic equipment
- ▶ Video equipment

Characteristics

- ▶ Low profile
- ▶ Space-saving design
- ▶ Front-flip mechanism



- ▶ 0.50mm Pitch, 2.1mm Height, narrow and compact design
- ▶ Easy to Insert FPC and operate Actuator Front-lock system
- ▶ Applicable for FFC thickness is 0.30±0.03mm

Specifications

Rated Current	Contact Resistance	Dielectric Strength	Temperature Range
0.5A Max.	50mΩ Max.	AC 200V	-35°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	CODE
30				19.88	PF050-L30B-C21
40	0.50	5.0	2.10	24.88	PF050-L40B-C21
60				34.88	PF050-L60B-C21

FPC/FFC Connector FPC 0.5 Narrow

Mobile Connector

PF050-L30B-C21 | PF050-L40B-C21 | PF050-L60B-C21

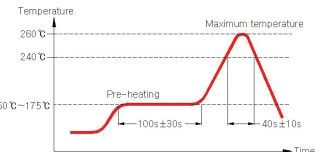
Product Specification

Ratings	Rated current	0.5A Max. / contact	Operating temperature range	-35°C to +85°C 1)	Storage temperature range	15°C ~ 35°C
	Rated voltage	50V AC, DC	Operating humidity range	80%RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC Specification : T=0.30±0.03mm

Items	Specifications	Conditions
1. Contact resistance	50mΩ Max. / contact	Closed circuit Current : 1mA. Open circuit voltage : 20mV
2. Insulation resistance	500MΩ Min.	Test voltage : 500V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 250V for 1minute
4. Durability	No damage or mechanical defect Contact resistance : 50mΩ Max. / contact	Number of cycles : 20 cycles.
5. Vibration	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out Contact resistance : 50mΩ Max. / contact	Amplitude: 1.5mm Test current: DC 100mA Frequency: 10-55-10Hz/Min Duration : XYZ axis 2h each (6h in total)
6. Shock	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out	Acceleration : 490m/s ² (50G) Half sine wave: [Duration : 11ms] XYZ axis 3times per each direction Test current: DC 100mA
7. Humidity	No damage or mechanical defect Contact resistance : 50mΩ Max. / contact Insulation Resistance : 100MΩ Min.	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
8. Temperature cycle	No damage or mechanical defect Contact resistance : 50mΩ Max. / contact Insulation Resistance : 100MΩ Min.	Temperature : 25~65~25~65~25~-10~25°C Humidity : 90% ~ 95% 5 cycles
9. Solder heat resistance	Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.	Reflow : Refer to the recommended reflow condition. 

Materials / Finish

Part	Materials	Finish	UL Regulation
Base Insulation	LCP	Natural	UL94V-0
Actuator	PA	Black	UL94V-0
Contact Terminal	Phosphor Bronze	Au over Nickel	-
Fitting Nail	Phosphor Bronze	Sn over Nickel	-

FPC/FFC Connector **FPC 0.5 Narrow**

Mobile Connector

PF050-L30B-C21 | PF050-L40B-C21 | PF050-L60B-C21

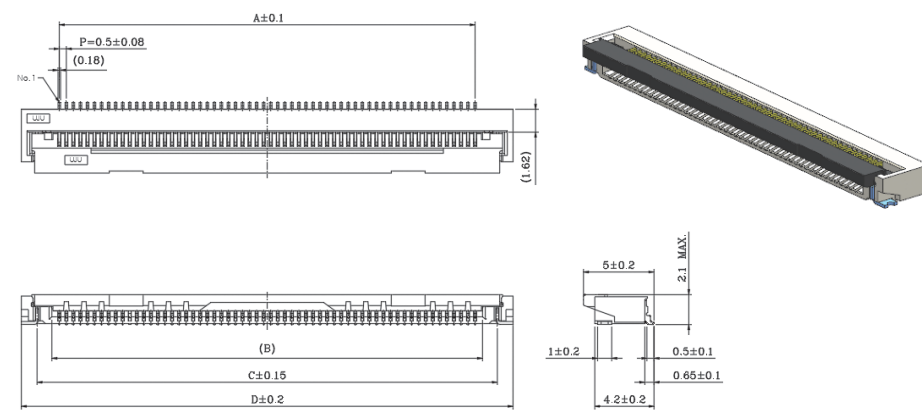
Product Number Structure

P F 050 - L xx B - C 21

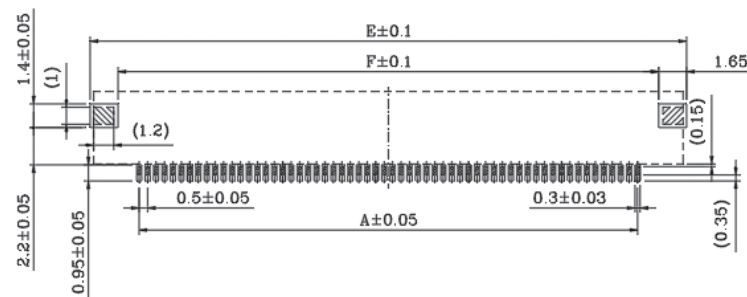
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : FPC/FFC
- ② Style : Non-FLIP
- ③ Contact Pitch : 0.50mm
- ④ Type : Locking
- ⑤ No. of position : 30p, 40p, 60p
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With locker
- ⑧ Connector Height : 2.1mm

Product Drawing



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D	D	E
PF050-L30B-C21	30	14.5	15.55	17.66	19.88	20.3	17
PF050-L40B-C21	40	19.5	20.55	22.66	24.88	25.3	22
PF050-L60B-C21	60	29.5	30.55	32.66	34.88	35.3	32

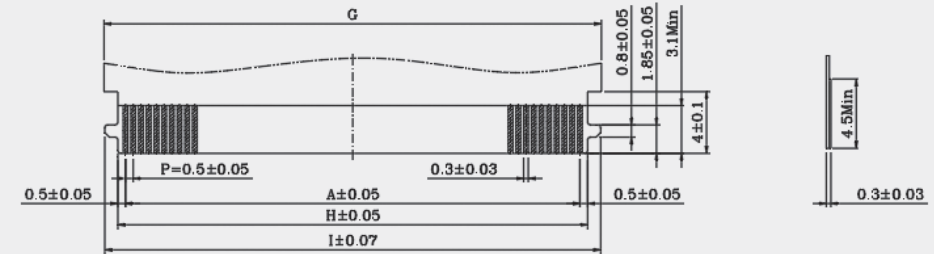
Note 1 : Please place orders in full reel quantities. (1Reel = 2,000ea)
 Note 2 : This connector has no polarity.

FPC/FFC Connector **FPC 0.5 Narrow**

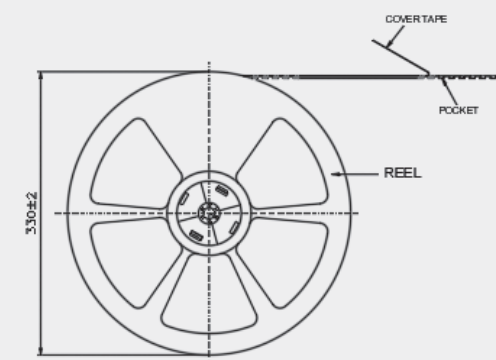
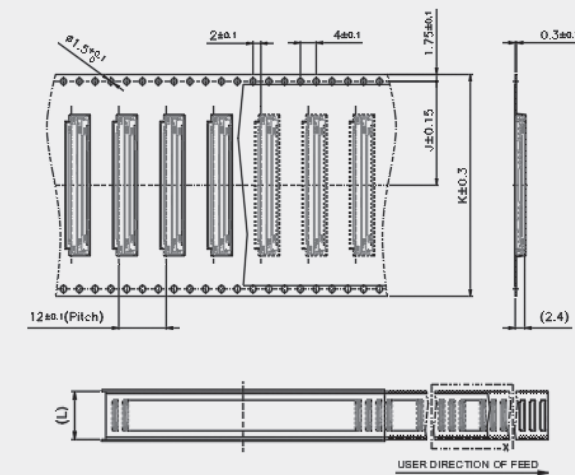
Mobile Connector

PF050-L30B-C21 | PF050-L40B-C21 | PF050-L60B-C21

Recommended FPC Dimensions



Packing Drawing



Unit : mm

Product No.	No. of Contacts	A	B	B	C	D	D	E
PF050-L30B-C21	30	14.5	17.3	15.5	17.2	14.2	32	33.4
PF050-L40B-C21	40	19.5	22.3	20.5	22.2	20.2	44	45.4
PF050-L60B-C21	60	29.5	32.3	30.5	32.2	20.2	44	45.4

Note 1 : Please place orders in full reel quantities. (1Reel = 2,000ea)
 Note 2 : This connector has no polarity.

FPC/FFC Connector (FFC 1.0 4p Angle)

Mobile Connector

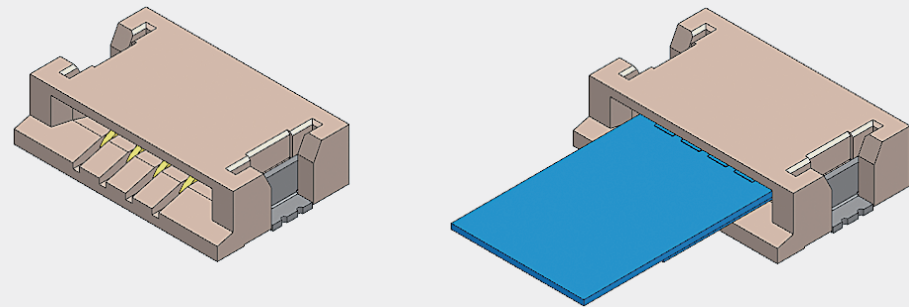
FN100-Z04B-C20

Applications

- ▶ Electronic equipment
- ▶ Video equipment

Characteristics

- ▶ Non-ZIF design
- ▶ Dual contact
- ▶ Horizontal mount type



- ▶ 1.0mm Pitch, 2.0mm Height
- ▶ Applicable for FFC thickness is 0.30±0.03mm

Specifications

Rated Current	Contact Resistance	Dielectric Strength	Temperature Range
1.0A Max.	100mΩ (Max.)	120V AC[RMS]	-35°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	CODE
4	1.0	6.0	2.0	7.7	FN100-Z04B-C20

FPC/FFC Connector (FFC 1.0 4p Angle)

Mobile Connector

FN100-Z04B-C20

Product Specification

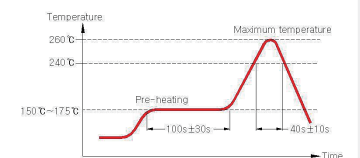
Ratings	Rated current	0.4A Max. (Signal) 13.0A Max (Power)	Operating temperature range	-35°C to +85°C 1)	Storage temperature range	+15°C to +35°C
	Rated voltage	40V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Applicable FFC Specification T=0.3±0.03mm

Items	Specifications	Conditions
1. Contact resistance	50mΩ Max. / contact	Closed circuit Current : 1mA. Opened circuit voltage : 20mV
2. Insulation resistance	100MΩ Min.	Test voltage : 500V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Insertion force	1.6Kgf Max.	Pull the FPC from a connector at a speed of 25mm/min and measured extraction force.
5. Withdrawal force	0.12kgf Min.	Pull the FPC(FFC) from a connector at a speed of 25mm/min and measured extraction force.
6. Vibration	No damage or mechanical defect Contact resistance : 40mΩ Max. / contact	Number of cycles : 10 cycles.
7. Shock	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out Contact resistance : 40mΩ Max. / contact	Amplitude: 1.5mm Frequency: 10-55-10Hz Duration : X,Y,Z axis each 2 hours
8. Humidity	No damage or mechanical defect Contact resistance : 40mΩ Max. / contact Insulation Resistance : 100MΩ Min.	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
9. Solder heat resistance	Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.	Reflow condition. (Refer to Reflow)



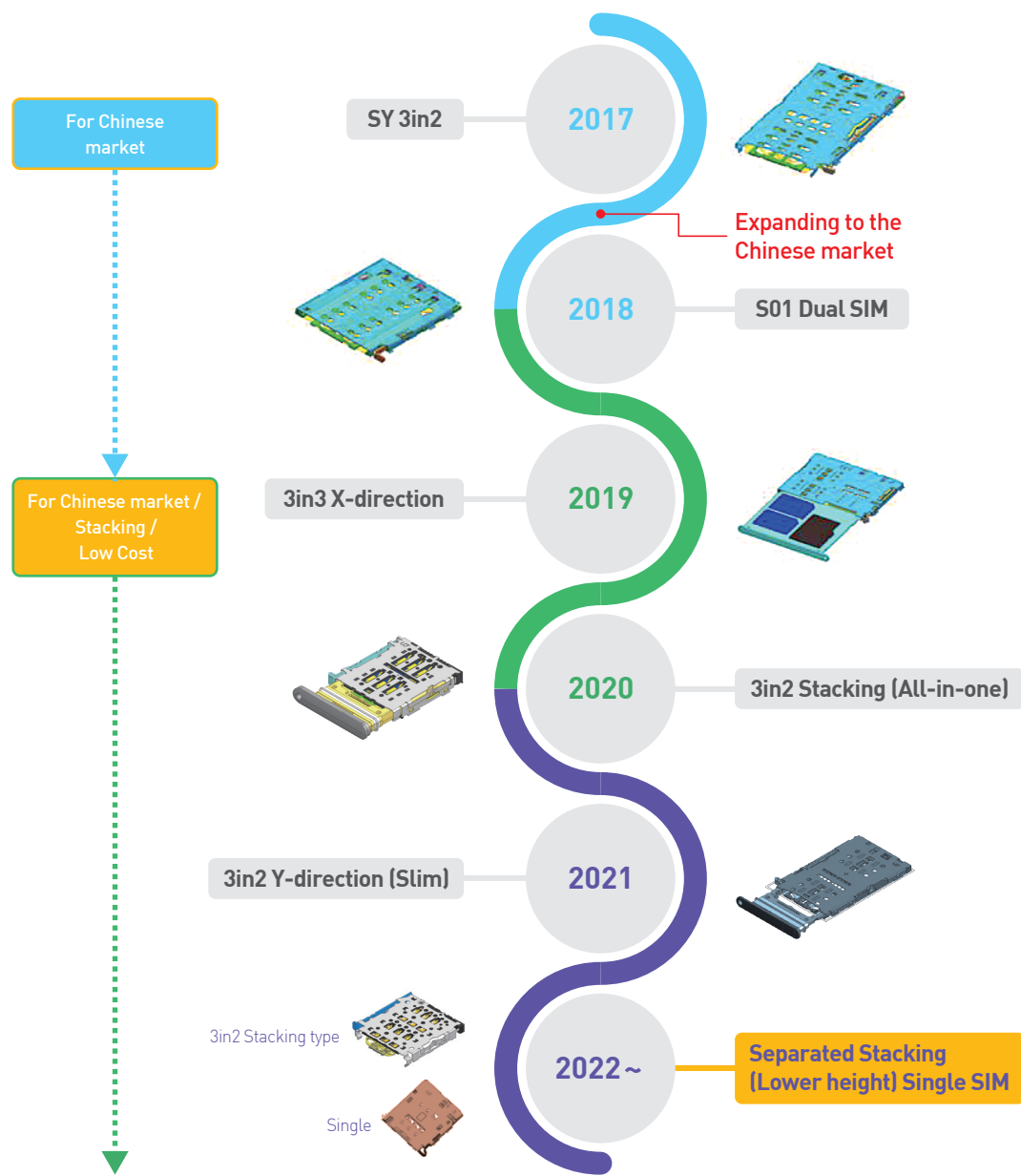
Materials / Finish

Part	Materials	Finish	UL Regulation
Base Insulation	LCP	Natural Color	UL94V-0
Contact Terminal	Phosphor Bronze	Au over Nickel	-
Fitting Nail	Brass	Sn over Nickel	-

SOCKET

Mobile Connector







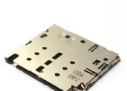
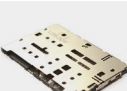




Road Map



SOCKET

Mobile Connector

*** : Available pins

Item	Concept	Length	Width	Height	Type	Code	Remark
	UCS3 Micro SIM Micro SD	13.00	18.30	2.28	Tray	DS110-C17B-C23-B	
	SC NANO SIM	15.00	13.18	1.45	Tray	SS254-C07B-C15	
	SD NANO SIM or Micro SD	17.40	16.50	1.30	Tray	DS254-C14B-C13	
	SE NANO SIM or Micro SD	18.20	18.70	1.46	Tray	DS110-C14B-C15	
	SG NANO SIM 2ea	16.20	24.20	1.45	Tray	DS254-C14B-C15	
	SH NANO SIM	16.80	18.80	1.40	Tray	SS254-C07B-C14	
	SM NANO SIM	13.65	13.25	1.23	P/Push	NS254-C07B-C12	
	SN NANO SIM & Micro SD or NANO SIM	18.40	28.78	1.45	Tray	DS254-C22B-C14	
	SO NANO SIM & Micro SD or NANO SIM	29.10	18.00	1.45	Tray	TS254-C21B-C15	
	SQ Micro SD	7.00	11.10	1.70	P/Pull	MS110-C09B-C17	
	S01 Dual NANO SIM	20.75	18.55	1.45	Tray	DS254-C13B-C14	
	S02 NANO SIM 2ea Micro SD	29.10	21.50	1.40	Tray	TS254-C20B-C14	

SIM and Memory Card Socket Connector

S02

Mobile Connector

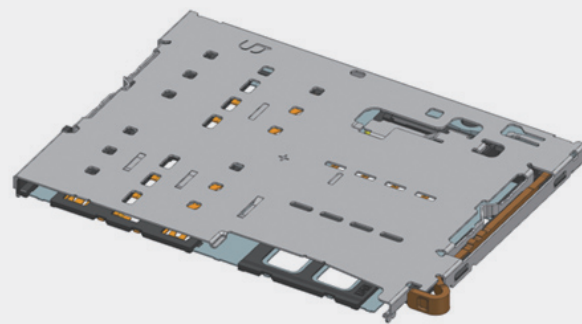
TS254-C20B-C14

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Combo 3in3 (microSD & nano-SIM *2) Socket
- ▶ Pin-Eject Tray Type
- ▶ Assembled Type



- ▶ 3in3 Mold Tray Socket
- ▶ SD & SIM Terminal deformation prevention structure
- ▶ TRAY reverse insertion prevention structure
- ▶ Switch OFF - ON Structure
- ▶ All-in-one Cover & Latch

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	100mΩ [Max.]	1,000MΩ [Min.]	AC 500V	-40°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	CODE
20	2.54	21.5	1.40	30.28	TS254-C20B-C14

SIM and Memory Card Socket Connector

S02

Mobile Connector

TS254-C20B-C14

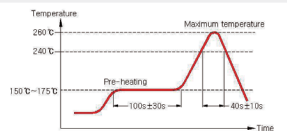
Product Specification

Ratings	Rated current	0.5A Max	Operating temperature range	-40°C to +85°C 1)	Storage temperature range	- 5°C to +40°C (With packing)
	Rated voltage	Max 10V AC(RMS) or DC	Operating humidity range	10% to 80% RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	100mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Tray insert force	1,000gf [Max.]	Insert the tray at a rate of 25±3 mm/min. (actual card used)
5. Rod withdrawal force	400~1200gf	- Press Rod with a pin. (Speed 25 mm/min) - Measure the force at the third time when the actual use card is mounted.
6. Durability	1) Check whether the SIM card terminal surface is split and the card terminal is short. 2) contact resistance - Max 100mΩ 3) Pin removal force (2,000 times) - 400~1200gf	1) Attach and detach 500 times. 2) Attach and detach 2,000 times. 3) Reattach the 0.7T SD/SIM card tested in Sample No.2 and attach/detach an additional 3,000 times
7. Vibration	Discontinuity : 1.0 microsec. MAX.	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz / Approx 1min. - Duration : 2h each [6h in total]
8. Shock resistance	Discontinuity : 1.0 microsec. MAX.	- Acceleration : 50G (490%) - Duration : 11ms - Number of shocks : 3 both axial directions, 3 times each, 18 times in total - Test voltage : 5V d.c. - Test current : 1mA d.c.
9. Humidity	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- 40±3(°C) : 30 minutes → 85±2(°C) : 30 minutes, 96 cycles
11. Solder heat resistance	- No have something wrong of push functions. - No have deformation and fall off. - No have something wrong outward appearance and structure.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base A	LCP	Black	UL94V-0
Terminal	Copper Alloy	Au-Pd , Ni plated	-
Cover	Stainless Steel	Au, Ni plated	-
Eject Rod	Stainless Steel	-	-
Lever	Stainless Steel	-	-

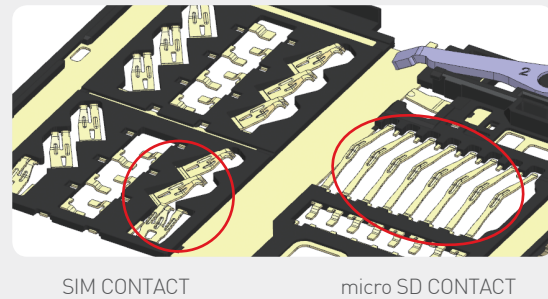
SIM and Memory Card Socket Connector **S02**

Mobile Connector

TS254-C20B-C14

FEATURES AND ADVANTAGES

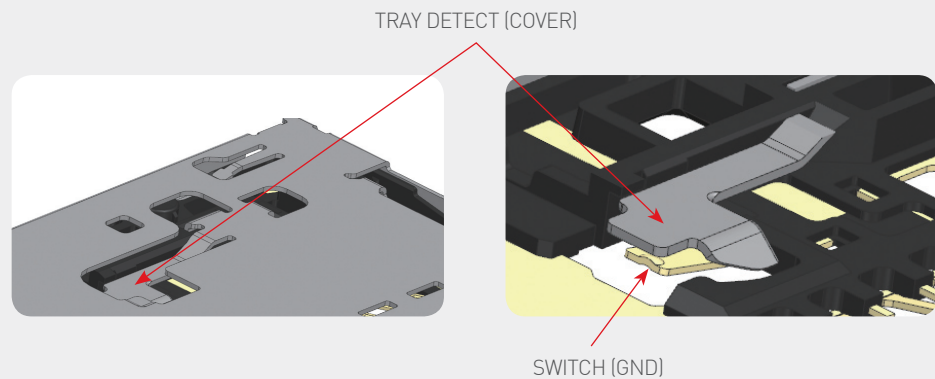
- ▶ SIM & SD Terminal deformation prevention structure
 - Strengthen contact stability
 - Improving product quality reliability



SIM CONTACT

micro SD CONTACT

- ▶ Switch y-axis ON-OFF structure
 - Normal [OPEN] → Tray inserted [CLOSE]
 - Strengthen contact stability
 - Improving product quality reliability



TRAY DETECT (COVER)

SWITCH (GND)

SIM and Memory Card Socket Connector **S02**

Mobile Connector

TS254-C20B-C14

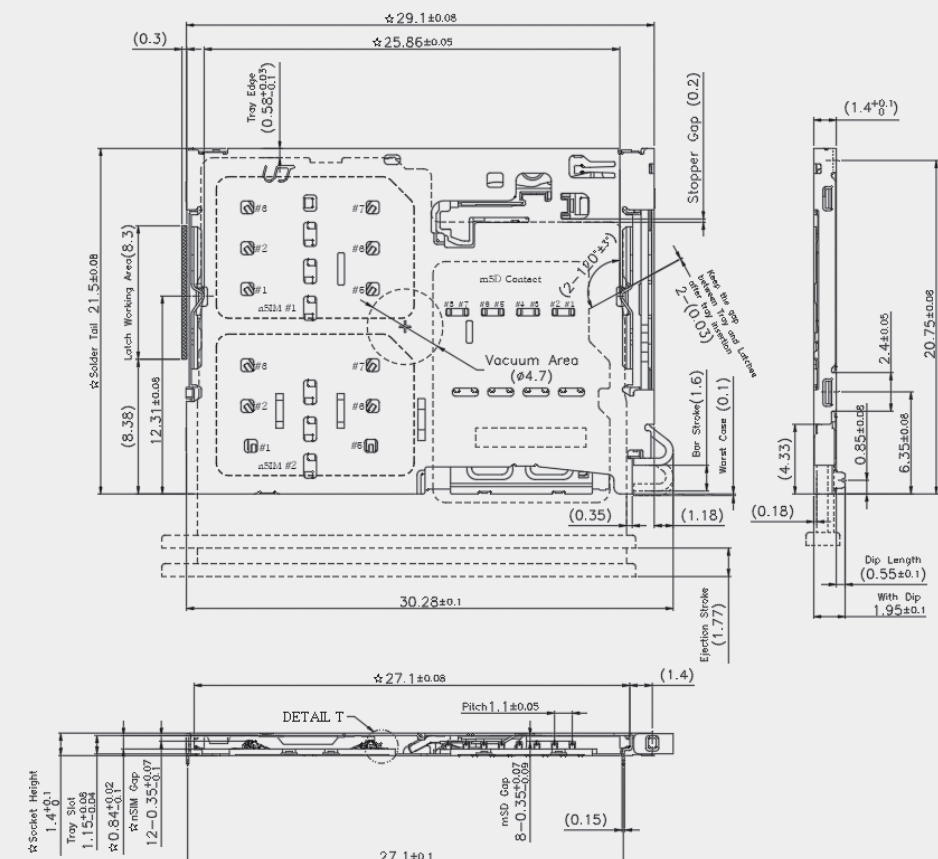
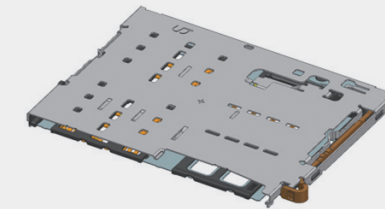
Product Number Structure

T S 254 - C 20 B - C 14

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- | | |
|--------------------------------------|-------------------------------|
| ① Type of connectors : TRIPLE SOCKET | ② Style : Socket |
| ③ Contact Pitch : 2.54mm | ④ Type : Shell cover |
| ⑤ No. of position : 20P | ⑥ Test of on board : Board on |
| ⑦ Shape symbol : With Fitting | ⑧ Connector Height : 1.40mm |

Product Drawing

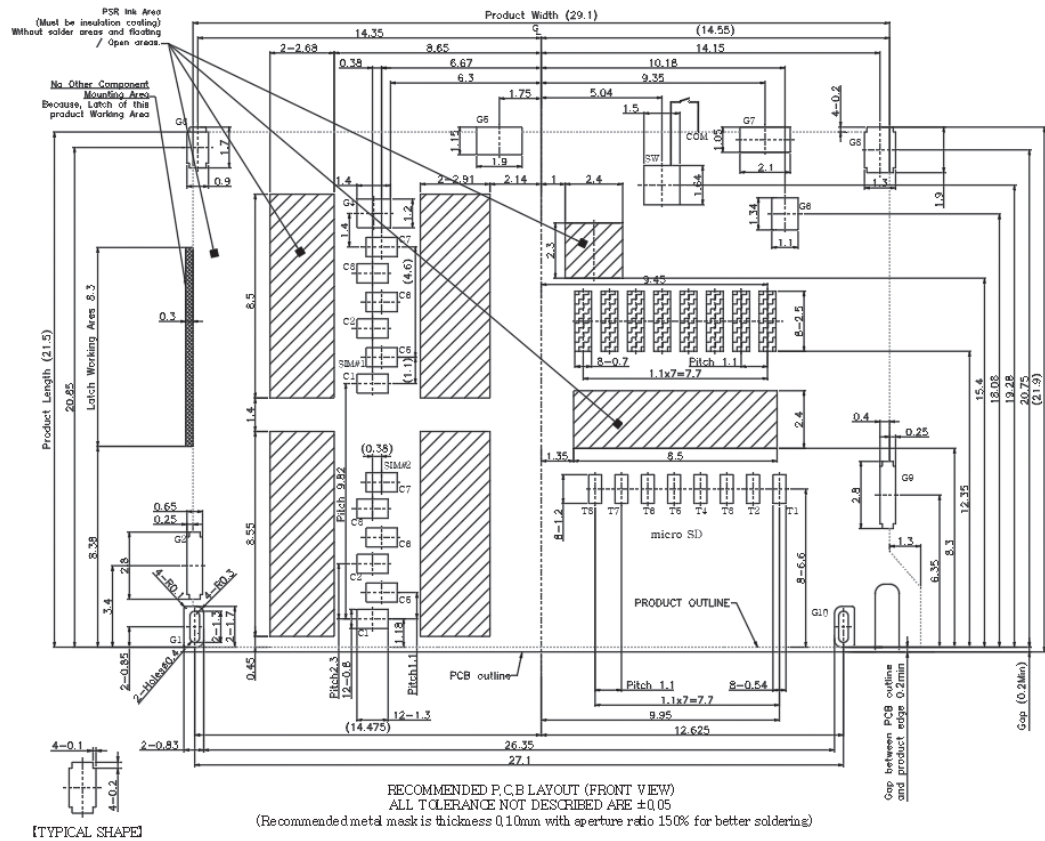


SIM and Memory Card Socket S02 Connector

Mobile Connector

TS254-C20B-C14

Recommended PCB Dimensions



- Not connect (Peel cover layer/Open)
Tips of micro-SD contact terminals are always sliding on PCB when mSD card inserted.
So, it is possible to make scratches on the PCB.
- Hatching area are pattern prohibition (No Via / No Trace)
Because of contact terminals are touchable

[NANO SIM CARD PIN-MAP]		[micro SD CARD PIN-MAP]	
Pin No.	Description	Pin No.	Description
C1	VCC (Supply V)	T1	DAT2
C2	RST (Reset)	T2	CD/DAT8*
C3	CLK (Clock)	T3	CMD
(C4)	(None)	T4	VDD
C5	GND (Ground)	T5	CLK
C6	VPP (Program V)	T6	VSS (GND)
C7	I/O	T7	DAT0
(C8)	(None)	T8	DAT1
This product has no C4,C8 contact terminal. (이 제품은 C4,C8 접촉단자가 없음.)		G1-G10	GROUND
		S/W	TRAY DETECTION SWITCH
		COM	ALL OF GROUND (G1~G10)

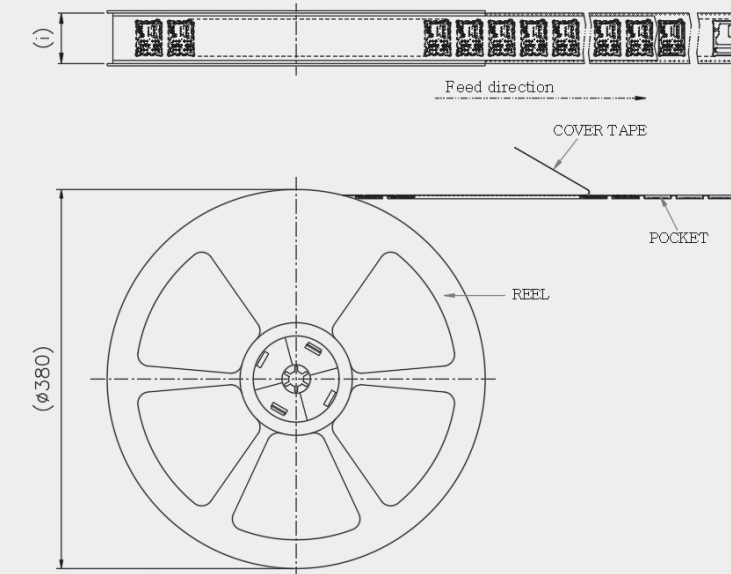
* There is only tray insertion / removal detection switch physically.
(물리적으로 트레이 삽입/ 제거 감지 스위치만 있음)
Therefore, After tray detection, (트레이 감지 후)
This product is necessary to detect the SIM or SD card separately in software.
(소프트웨어에서 SIM 또는 SD카드를 별도로 감지하기 위해 필요한 제품임.)

SIM and Memory Card Socket S02 Connector

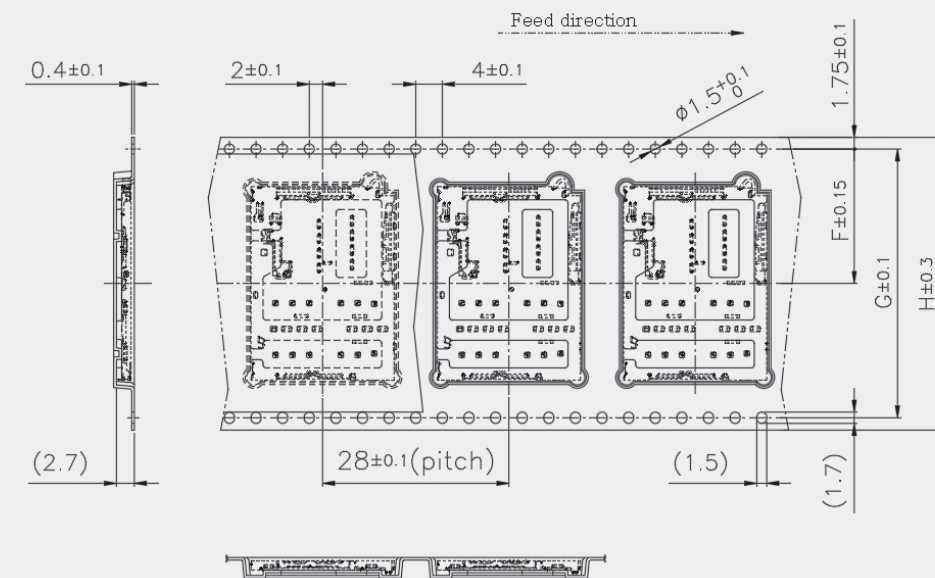
Mobile Connector

TS254-C20B-C14

Reel Dimensions



Embossed Carrier Tape Dimensions



[DIMENSION TABLE]

Product Name	Product Number	No. of Contacts	F	G	H	i
S02	TS254-C20B-C14	20	20.2	40.4	44	45.4

SIM and Memory Card Socket Connector **S04**

Mobile Connector

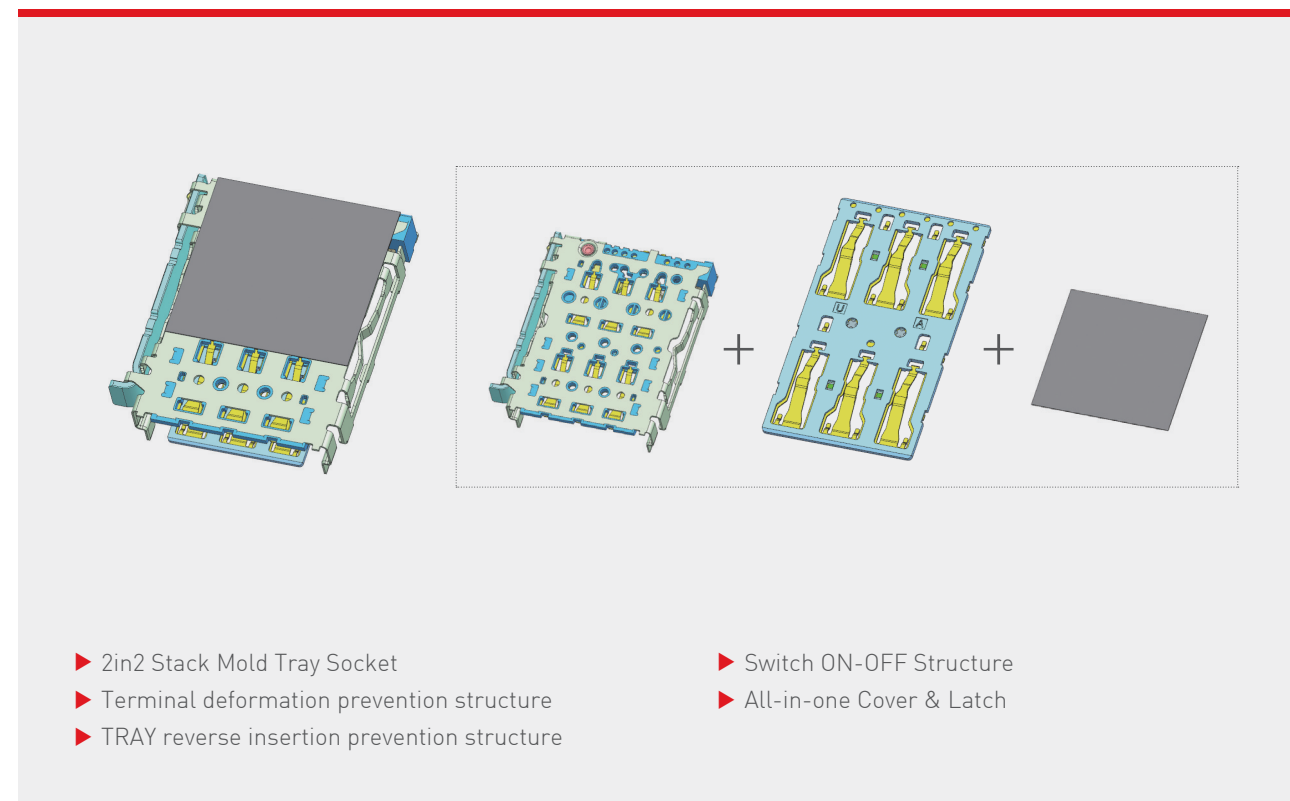
DS254-C13B-C26 | DS254-C13B-C26-A

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Combo Stack 2in2 (Dual nano-SIM) Socket
- ▶ Pin-Eject Tray Type
- ▶ Separated Type



Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	100mΩ [Max.]	1,000MΩ [Min.]	AC 500V	-40°C ~ 85°C
0.5A/Pin				

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	CODE
6	2.54	12.65	2.60	15.95	DS254-C13B-C26
6	2.54	7.8	0.85	13.75	DS254-C13B-C26-A

SIM and Memory Card Socket Connector **S04**

Mobile Connector

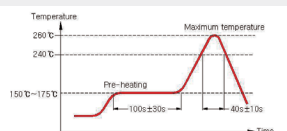
DS254-C13B-C26 | DS254-C13B-C26-A

Product Specification

Ratings	Rated current	TOP - 0.5A/Pin SIM - 0.3A/Pin	Operating temperature range	-40°C to +85°C 1)	Storage temperature range	-5°C to +40°C (With packing)
	Rated voltage	Max 10V AC(RMS) or DC		Operating humidity range		10% to 80% RH 2)

- 1) Including terminal temperature rise.
2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	100mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1 minute
4. Tray insert force	1,000gf [Max.]	Insert the tray at a rate of 25±3 mm/min. (actual card used)
5. Rod withdrawal force	400~1200gf	- Press Rod with a pin. (Speed 25 mm/min) - Measure the force at the third time when the actual use card is mounted.
6. Durability	1) Check whether the SIM card terminal surface is split and the card terminal is short. 2) contact resistance - Max 100mΩ 3) Pin removal force (2,000 times) - 400~1200gf	1) Attach and detach 500 times. 2) Attach and detach 2,000 times. 3) Reattach the 0.7T SD/SIM card tested in Sample No.2 and attach/detach an additional 3,000 times
7. Vibration	Discontinuity : 1.0 microsec. MAX.	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz / Approx 1min. - Duration : 2h each (6h in total)
8. Shock resistance	Discontinuity : 1.0 microsec. MAX.	- Acceleration : 50G (490%) - Duration : 11ms - Number of shocks : 3 both axial directions, 3 times each, 18 times in total - Test voltage : 5V d.c. - Test current : 1mA d.c.
9. Humidity	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- 40±3[°C] : 30 minutes → 85±2[°C] : 30 minutes, 96 cycles
11. Solder heat resistance	- No have something wrong of push functions. - No have deformation and fall off. - No have something wrong outward appearance and structure.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Top Base	LCP	Black	UL94V-0
Terminal	Copper Alloy	Au, Ni plated	-
Cover	Stainless Steel	Ni plated	-
Switch	Copper Alloy	Au, Ni plated	-
Eject Rod	Stainless Steel	-	-
Lever	Stainless Steel	-	-
Rivet Pin	Stainless Steel	-	-
SIM Base	LCP	Black	UL94V-0
SIM Terminal	Copper Alloy	Au, Ni plated	-
Pick-Up TAPE	PI	Black	-

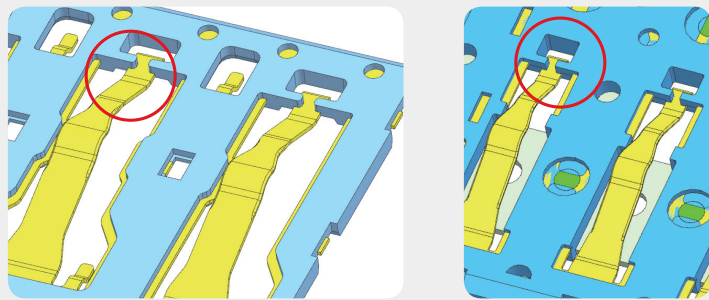
SIM and Memory Card Socket Connector **S04**

Mobile Connector

DS254-C13B-C26 | DS254-C13B-C26-A

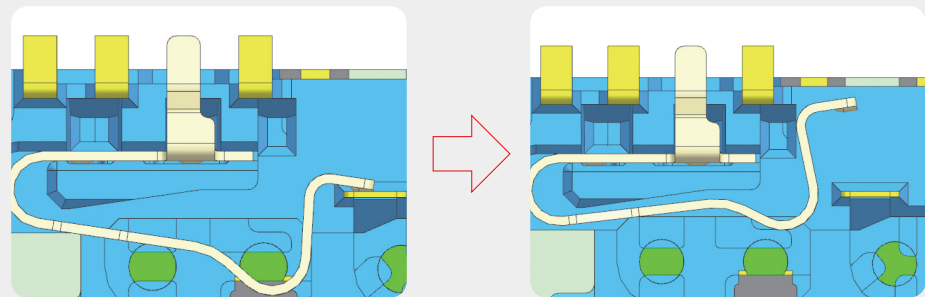
FEATURES AND ADVANTAGES

- ▶ **Dual SIM Terminal deformation prevention structure**
 - Strengthen contact stability
 - Improving product quality reliability



Insert Mold

- ▶ **Switch y-axis ON-OFF structure**
 - Normal [CLOSE] → Tray inserted [OPEN]
 - Strengthen contact stability
 - Improving product quality reliability



Card Tray Insertion

SIM and Memory Card Socket Connector **S04**

Mobile Connector

DS254-C13B-C26 | DS254-C13B-C26-A

Product Number Structure

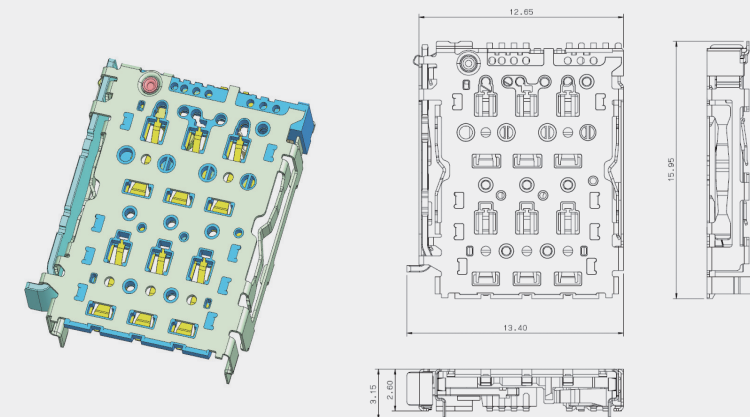
DS 254 - C 13 B - C 26 - *

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

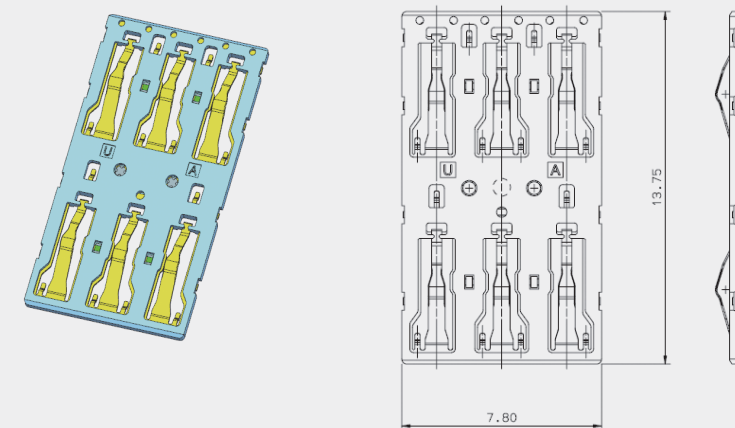
- | | |
|---|-------------------------------|
| ① Type of connectors : DUAL SOCKET | ② Style : Socket |
| ③ Contact Pitch : 2.54mm | ④ Type : Shell cover |
| ⑤ No. of position : 13P | ⑥ Test of on board : Board on |
| ⑦ Shape symbol : With Fitting | ⑧ Connector Height : 2.60mm |
| ⑨ Option
- None : TOP Ass'y
- A : SIM Ass'y | |

Product Drawing

TOP Ass'y



SIM Ass'y

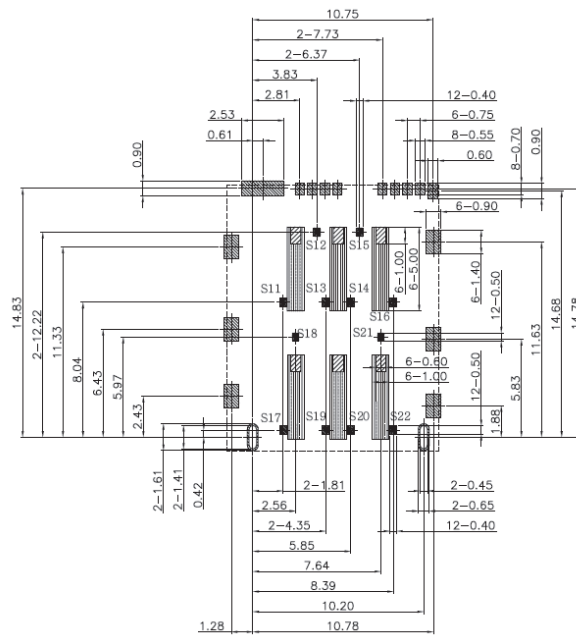


SIM and Memory Card Socket Connector S04

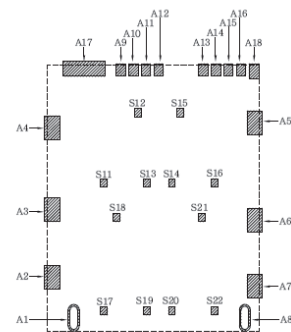
Mobile Connector

DS254-C13B-C26 | DS254-C13B-C26-A

Recommended PCB Dimensions



- (▨) Soldering PAD area
 - (▧) Open wire restricted area (Possibility touch of components on PCB)
 - (▩) Connector outline
 - (▪) Non solder PAD area
1. Touch area of contact tips. No electrical function and only for mechanical function.
 2. Don't brush tin pasted on the area during SMT process.
- METAL MASK thickness : 0.10mm

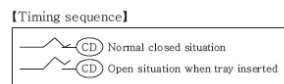


【TOP CONNECTOR】

Pin No.	n-SIM	Description
A15	C1	VCC (Supply V)
A11	C2	RST (Reset)
A9	C3	CLK (Clock)
A16	C5	GND (Ground)
A12	C6	VPP (Program V)
A10	C7	I/O
Shell GND : A1~A8, A17, A18		
Detect PIN : A13(Detect pin)-A14(GND pin)		

【NANO SIM Block PIN MAP】

Pin No.	n-SIM	Description
S1,S12	B1	VCC (Supply V)
S13,S14	B2	RST (Reset)
S15,S16	B3	CLK (Clock)
S17,S18	B5	GND (Ground)
S19,S20	B6	VPP (Program V)
S21,S22	B7	I/O



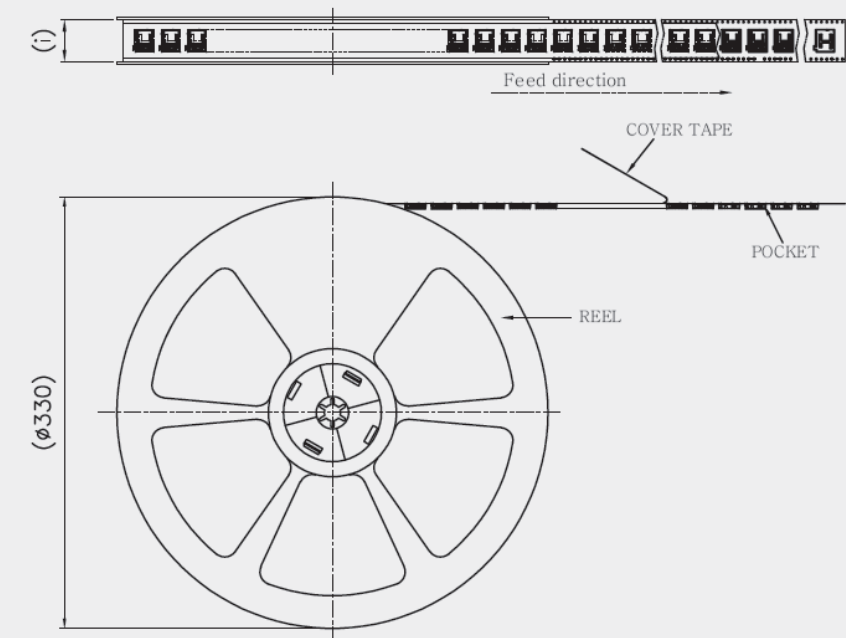
SIM and Memory Card Socket Connector S04

Mobile Connector

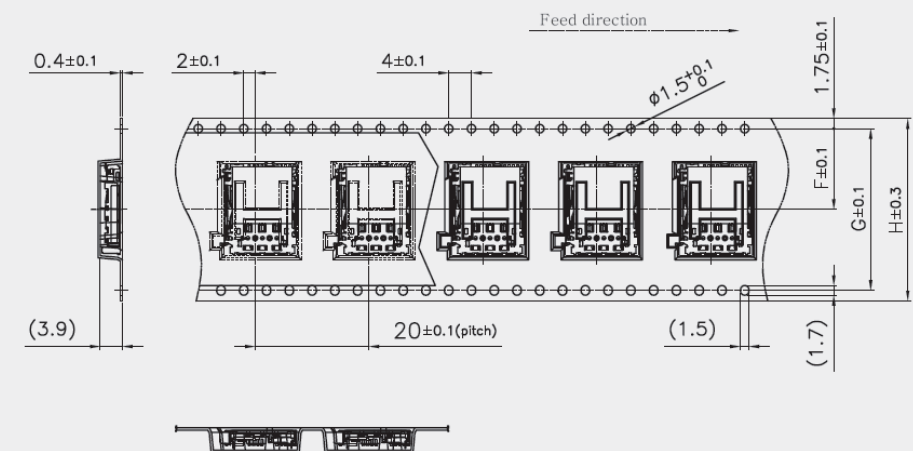
DS254-C13B-C26 | DS254-C13B-C26-A

1. TOP Assembly

Reel Dimensions



Embossed Carrier Tape Dimensions



【DIMENSION TABLE】

Product Name	Product Number	No. of Conctcs	F	G	H	i
S04	DS254-C13B-C26	13	14.2	28.4	32	33.4

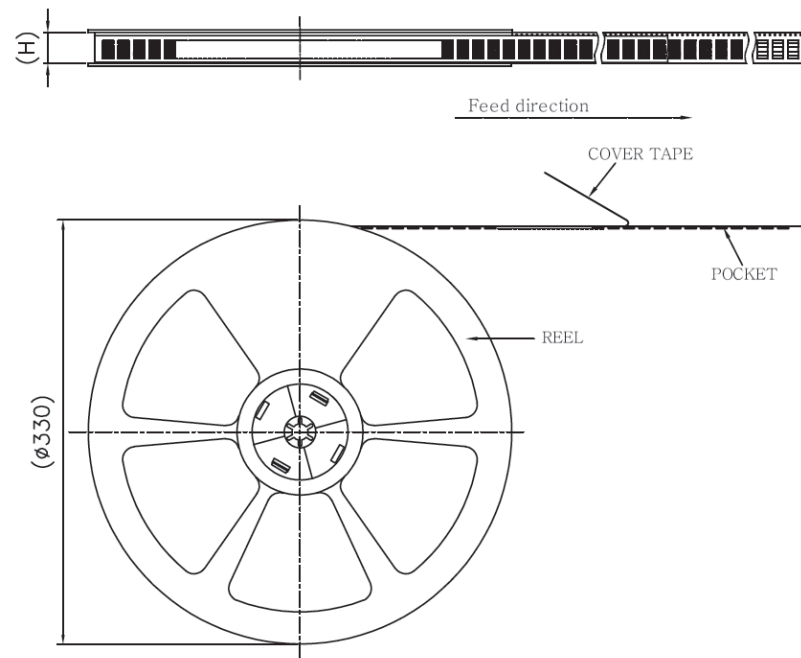
SIM and Memory Card Socket Connector **S04**

Mobile Connector

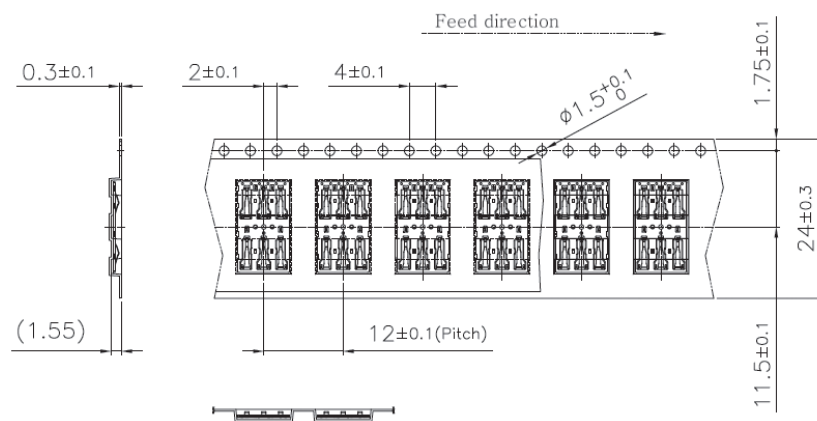
DS254-C13B-C26 | DS254-C13B-C26-A

2. SIM Assembly

Reel Dimensions



Embossed Carrier Tape Dimensions



【DIMENSION TABLE】

Product Name	Product Number	No. of Contacts	F	G	H
S04	DS254-C13B-C26-A	13	11.5	24	25.4

SIM and Memory Card Socket Connector **S0**

Mobile Connector

TS254-C21B-C15

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Combo 3in2 (microSD & nano-SIM) Socket
- ▶ Pin-Eject Tray Type
- ▶ Assembled Type



- ▶ 3in2 Mold Tray Socket
- ▶ SD & SIM Terminal deformation prevention structure
- ▶ TRAY reverse insertion prevention structure
- ▶ Switch OFF-ON Structure
- ▶ All-in-one Cover & Latch

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	100mΩ [Max.]	1,000MΩ [Min.]	AC 500V	-40°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	CODE
21	2.54	18	1.45	29.1	TS254-C21B-C15

SIM and Memory Card Socket Connector SO

Mobile Connector

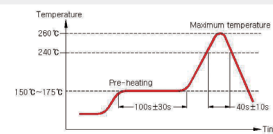
TS254-C21B-C15

Product Specification

Ratings	Rated current	0.5A/Pin	Operating temperature range	-40°C to +85°C 1)	Storage temperature range	- 5°C to +40°C (With packing)
	Rated voltage	Max 10V AC(RMS) or DC	Operating humidity range	10% to 80% RH 2)	Storage humidity range	65%RH

- 1) Including terminal temperature rise.
 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	100mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Tray insert force	1,000gf [Max.]	Insert the tray at a rate of 25±3 mm/min. (actual card used)
5. Rod withdrawal force	- SIM1+SIM2 : 400-1200gf - SIM1+SD : 400-1300gf	- Press Rod with a pin. (Speed 25 mm/min) - Measure the force at the third time when the actual use card is mounted.
6. Durability	1) Check whether the SIM card terminal surface is split and the card terminal is short. 2) contact resistance - Max 100mΩ 3) Pin removal force (2,000 times) - SIM1+SIM2 : 400-1200gf - SIM1+SD : 400-1300gf	1) Attach and detach 500 times. 2) Attach and detach 2,000 times. 3) Reattach the 0.7T SD/SIM card tested in Sample No.2 and attach/detach an additional 3,000 times
7. Vibration	Discontinuity : 1.0 microsec. MAX.	- Vibration frequency range : 10-55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz / Approx 1min. - Duration : 2h each (6h in total)
8. Shock resistance	Discontinuity : 1.0 microsec. MAX.	- Acceleration : 50G (490%) - Duration : 11ms - Number of shocks : 3 both axial directions, 3 times each, 18 times in total - Test voltage : 5V d.c. - Test current : 1mA d.c.
9. Humidity	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- 40±3(°C) : 30 minutes → 85±2(°C) : 30 minutes, 96 cycles
11. Solder heat resistance	- No have something wrong of push functions. - No have deformation and fall off. - No have something wrong outward appearance and structure.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Terminal	Copper Alloy	Au, Ni plated	-
Cover	Stainless Steel	Ni plated	-
Switch	Copper Alloy	Au, Ni plated	-
Eject Rod	Stainless Steel	-	-
Lever	Stainless Steel	-	-

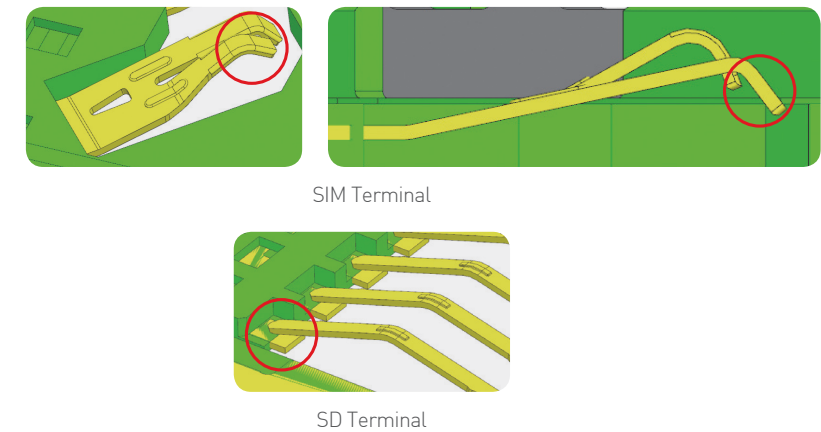
SIM and Memory Card Socket Connector SO

Mobile Connector

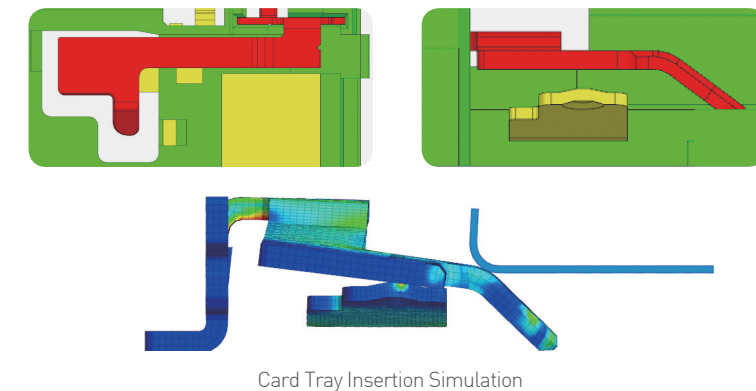
TS254-C21B-C15

FEATURES AND ADVANTAGES

- ▶ **Dual SIM Terminal deformation prevention structure**
 - Strengthen contact stability
 - Improving product quality reliability



- ▶ **Switch y-axis ON-OFF structure**
 - Normal [CLOSE] → Tray inserted [OPEN]
 - Strengthen contact stability
 - Improving product quality reliability



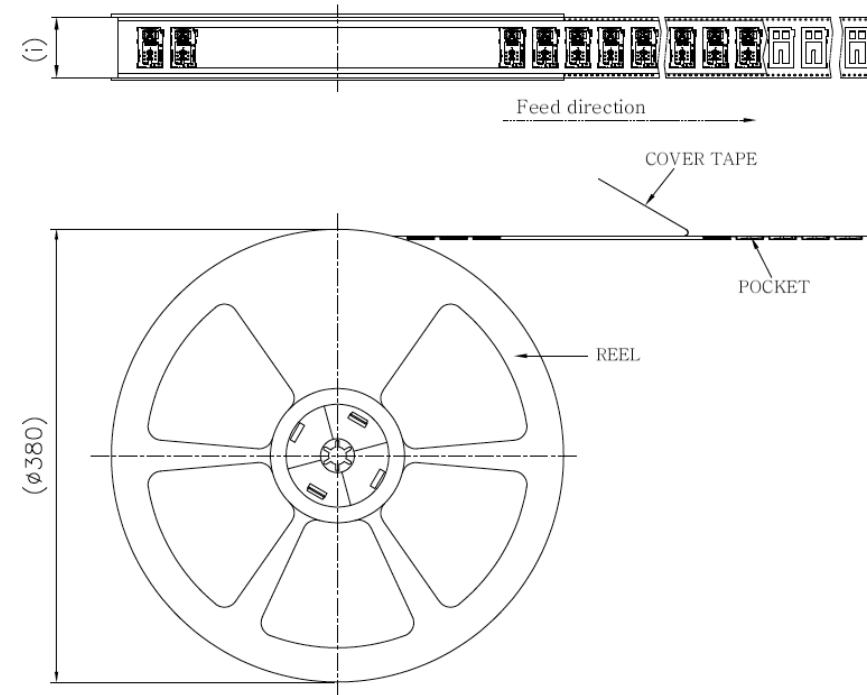
Card Tray Insertion Simulation

SIM and Memory Card Socket Connector **SO**

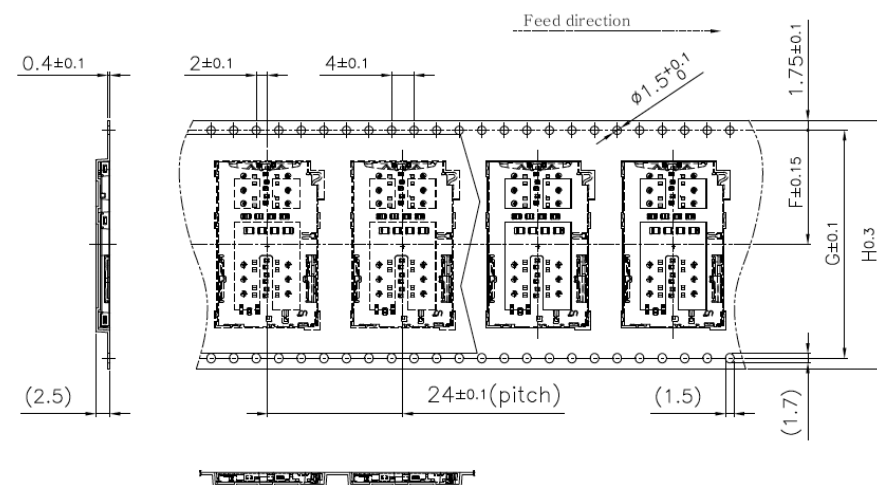
Mobile Connector

TS254-C21B-C15

Reel Dimensions



Embossed Carrier Tape Dimensions



【DIMENSION TABLE】

Product Name	Product Number	No. of Contacts	F	G	H	i
SO	TS254-C21B-C15	21	20.2	40.4	44	45.4

SIM and Memory Card Socket Connector **SY**

Mobile Connector

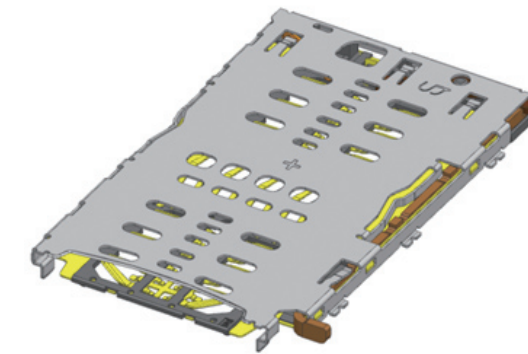
TS254-C21B-C14

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Combo 3in2 (microSD & nano-SIM) Socket
- ▶ Pin-Eject Tray Type
- ▶ Assembled Type



- ▶ 3in2 Mold Tray Socket
- ▶ SD & SIM Terminal deformation prevention structure
- ▶ TRAY reverse insertion prevention structure
- ▶ Switch ON - OFF Structure
- ▶ All-in-one Cover & Latch

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	50mΩ [Max.]	1,000MΩ [Min.]	AC 500V	-40°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	CODE
21	2.54	27.30	1.35	16.60	TS254-C21B-C14

SIM and Memory Card Socket Connector **SY**

Mobile Connector

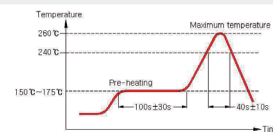
TS254-C21B-C14

Product Specification

Ratings	Rated current	0.5A/Pin	Operating temperature range	-40°C to +85°C 1)	Storage temperature range	- 5°C to +40°C (With packing)
	Rated voltage	Max 10V AC(RMS) or DC	Operating humidity range	10% to 80% RH 2)	Storage humidity range	65%RH

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	50mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Tray insert force	1,000gf [Max.]	Insert the tray at a rate of 25±3 mm/min. (actual card used)
5. Rod withdrawal force	400~1200gf	- Press Rod with a pin. (Speed 25 mm/min) - Measure the force at the third time when the actual use card is mounted.
6. Durability	1) Check whether the SIM card terminal surface is split and the card terminal is short. 2) contact resistance - Max 100mΩ 3) Pin removal force (2,000 times) - SIM1+SIM2 : 400~1200gf - SIM1+SD : 400~1300gf	1) Attach and detach 500 times. 2) Attach and detach 2,000 times. 3) Reattach the 0.7T SD/SIM card tested in Sample No.2 and attach/detach an additional 3,000 times
7. Vibration	Discontinuity : 1.0 microsec. MAX.	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz / Approx 1min. - Duration : 2h each (6h in total)
8. Shock resistance	Discontinuity : 1.0 microsec. MAX.	- Acceleration : 50G (490%) - Duration : 11ms - Number of shocks : 3 both axial directions, 3 times each, 18 times in total - Test voltage : 5V d.c. - Test current : 1mA d.c.
9. Humidity	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- 40±3(°C) : 30 minutes → 85±2(°C) : 30 minutes, 96 cycles
11. Solder heat resistance	- No have something wrong of push functions. - No have deformation and fall off. - No have something wrong outward appearance and structure.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Terminal	Copper Alloy	Au, Ni plated	-
Cover	Stainless Steel	Au, Ni plated	-
Switch	Copper Alloy	Au, Ni plated	-
Eject Rod	Stainless Steel	-	-
Lever	Stainless Steel	-	-

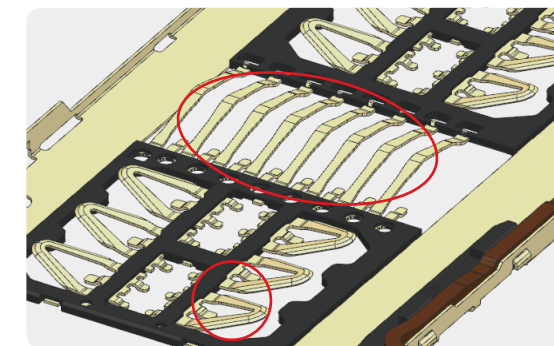
SIM and Memory Card Socket Connector **SY**

Mobile Connector

TS254-C21B-C14

FEATURES AND ADVANTAGES

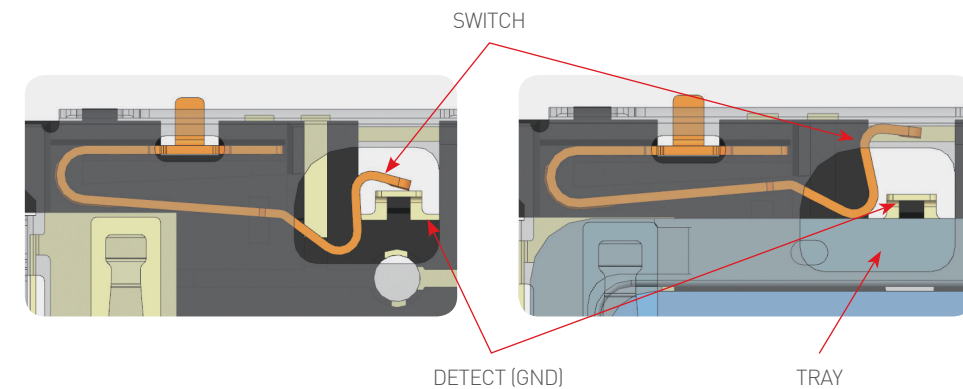
- ▶ **SIM & SD Terminal deformation prevention structure**
 - Strengthen contact stability
 - Improving product quality reliability



micro SD CONTACT

SIM CONTACT - Triangle

- ▶ **Switch y-axis ON-OFF structure**
 - Normal [CLOSE] → Tray inserted [OPEN]
 - Strengthen contact stability
 - Improving product quality reliability



SIM and Memory Card Socket Connector **SY**

Mobile Connector

TS254-C21B-C14

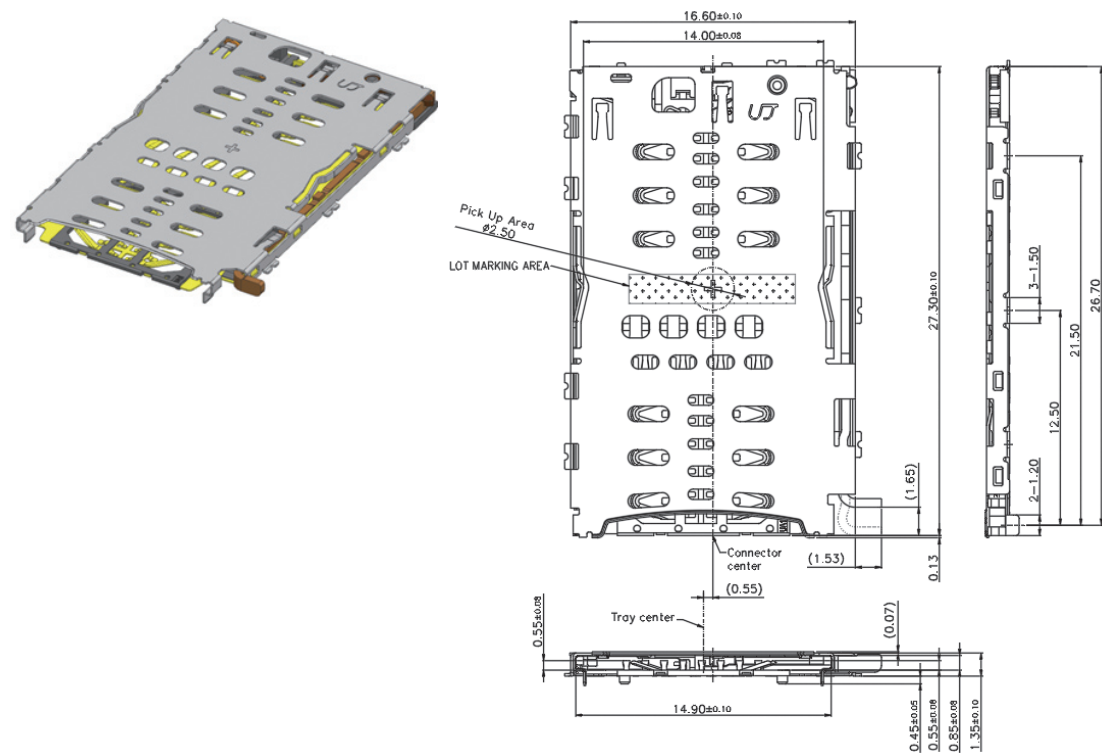
Product Number Structure

T S 254 - C 21 B - C 14

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : TRIPLE SOCKET
- ② Style : Socket
- ③ Contact Pitch : 2.54mm
- ④ Type : Shell cover
- ⑤ No. of position : 21P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting
- ⑧ Connector Height : 1.35mm

Product Drawing

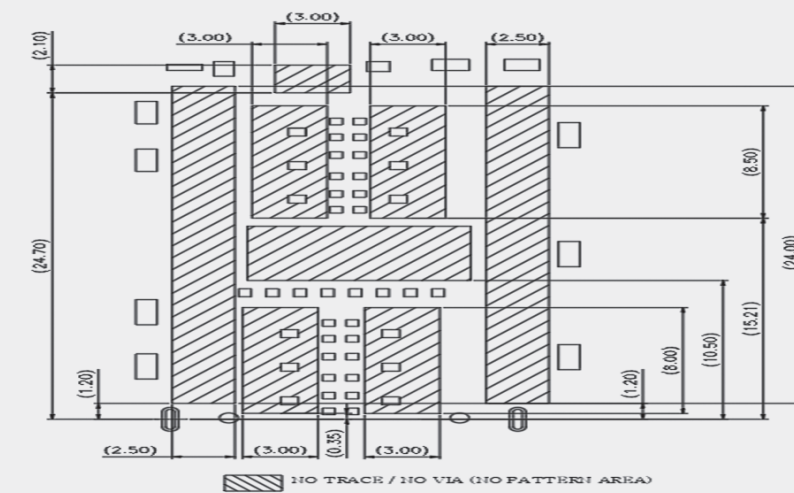
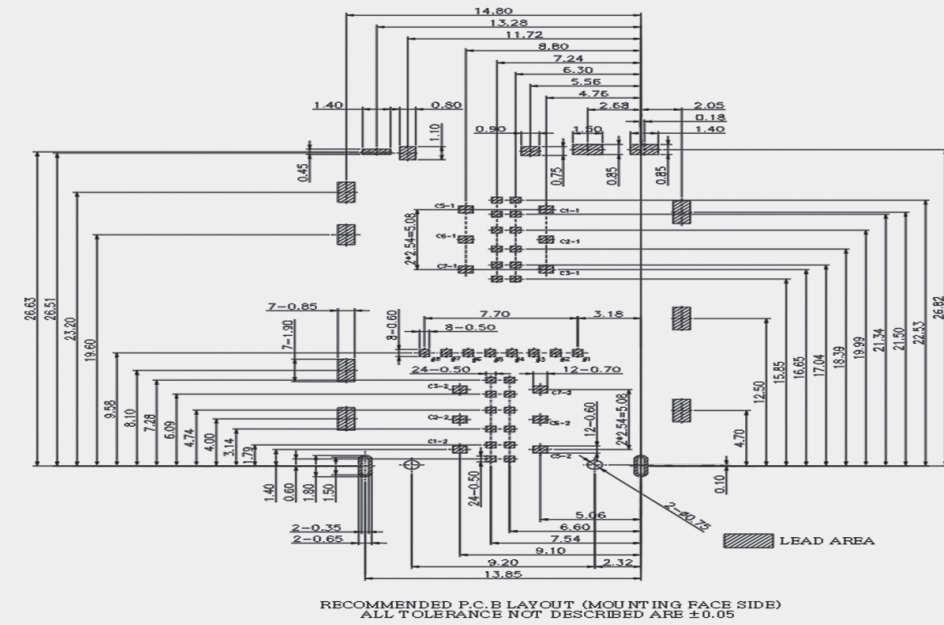


SIM and Memory Card Socket Connector **SY**

Mobile Connector

TS254-C21B-C14

Recommended PCB Dimensions



COMPOSITION OF DETECTION
TRAY DETECT(SW)
S/W (Open)
CLOSE (NORMAL) : NONE TRAY
OPEN : TRAY IN

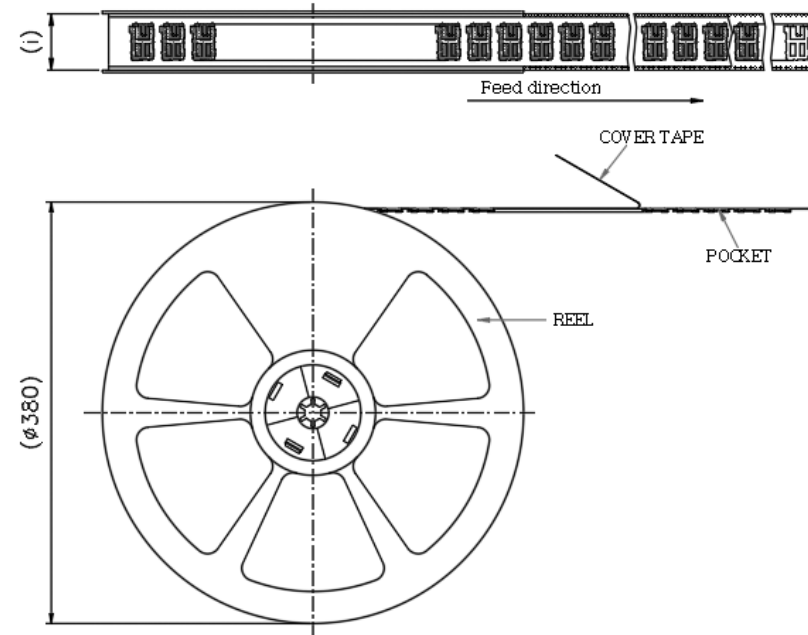
NANO SIM CARD PIN-MAP		micro SD Card	
C1-1	C1-2	VCC (Supply V)	#1 DAT2
C2-1	C2-2	RST (Reset)	#2 CD/DAT3
C3-1	C3-2	CLK (Clock)	#3 CMD
C5-1	C5-2	GND	#5 CLK
C6-1	C6-2	VPP (Program V)	#6 VSS
C7-1	C7-2	I/O	#7 DAT0
			#8 DAT1

SIM and Memory Card Socket Connector **SY**

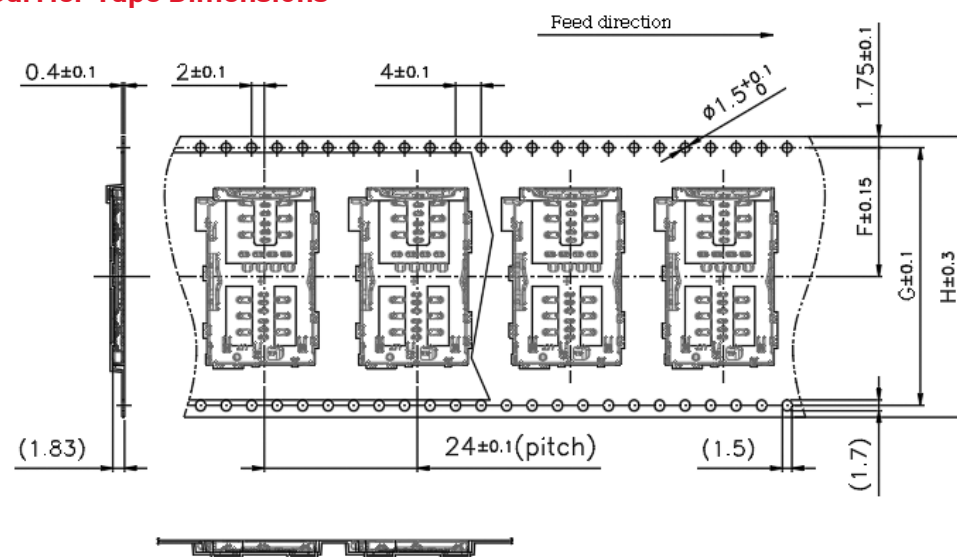
Mobile Connector

TS254-C21B-C14

Reel Dimensions



Embossed Carrier Tape Dimensions



【DIMENSION TABLE】

Product Name	Product Number	No. of Contacts	F	G	H	i
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SIM and Memory Card Socket Connector **SN**

Mobile Connector

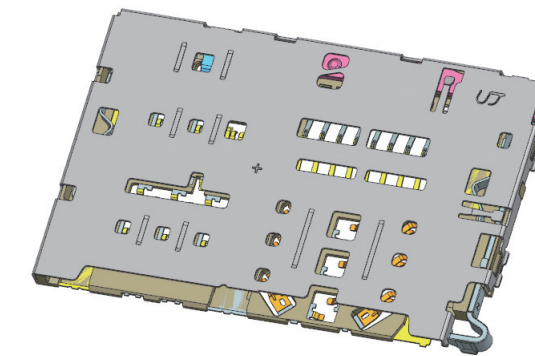
TS254-C22B-C14

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Combo 3in2 (microSD & nano-SIM) Socket
- ▶ Pin-Eject Tray Type
- ▶ Assembled Type



- ▶ 3in2 Mold Tray Socket
- ▶ SD & SIM Terminal deformation prevention structure
- ▶ TRAY reverse insertion prevention structure
- ▶ Switch OFF-ON Structure

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	100mΩ [Max.]	1,000MΩ [Min.]	AC 500V	-40°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	CODE
22	2.54	28.78	1.45	18.4	TS254-C22B-C14

SIM and Memory Card Socket Connector SN

Mobile Connector

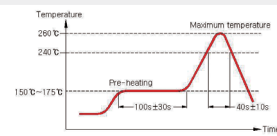
TS254-C22B-C14

Product Specification

Ratings	Rated current	0.5A/Pin	Operating temperature range	-40°C to +85°C 1)	Storage temperature range	- 5°C to +40°C (With packing)
	Rated voltage	Max 10V AC(RMS) or DC	Operating humidity range	10% to 80% RH 2)	Storage humidity range	65%RH

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	100mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Tray insert force	1,000gf [Max.]	Insert the tray at a rate of 25±3 mm/min. (actual card used)
5. Rod withdrawal force	- SIM1+SIM2 : 400~1200gf - SIM1+SD : 400~1300gf	- Press Rod with a pin. (Speed 25 mm/min) - Measure the force at the third time when the actual use card is mounted.
6. Durability	1) Check whether the SIM card terminal surface is split and the card terminal is short. 2) contact resistance - Max 100mΩ 3) Pin removal force (2,000 times) - SIM1+SIM2 : 400~1200gf - SIM1+SD : 400~1300gf	1) Attach and detach 500 times. 2) Attach and detach 2,000 times. 3) Reattach the 0.7T SD/SIM card tested in Sample No.2 and attach/detach an additional 3,000 times
7. Vibration	Discontinuity : 1.0 microsec. MAX.	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz / Approx 1min. - Duration : 2h each (6h in total)
8. Shock resistance	Discontinuity : 1.0 microsec. MAX.	- Acceleration : 50G (490%) - Duration : 11ms - Number of shocks : 3 both axial directions, 3 times each, 18 times in total - Test voltage : 5V d.c. - Test current : 1mA d.c.
9. Humidity	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- 40±3[°C] : 30 minutes → 85±2[°C] : 30 minutes, 96 cycles
11. Solder heat resistance	- No have something wrong of push functions. - No have deformation and fall off. - No have something wrong outward appearance and structure.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Terminal	Copper Alloy	Au, Ni plated	-
Cover	Stainless Steel	Ni plated	-
Switch	Copper Alloy	Au, Ni plated	-
Eject Rod	Stainless Steel	-	-
Lever	Stainless Steel	-	-
Latch	Stainless Steel	Ni plated	-

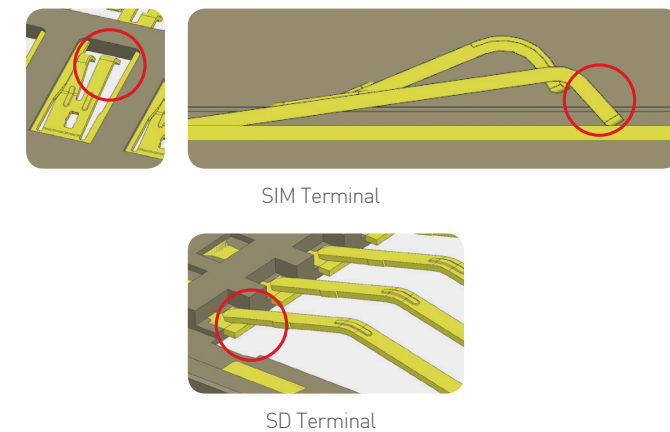
SIM and Memory Card Socket Connector SN

Mobile Connector

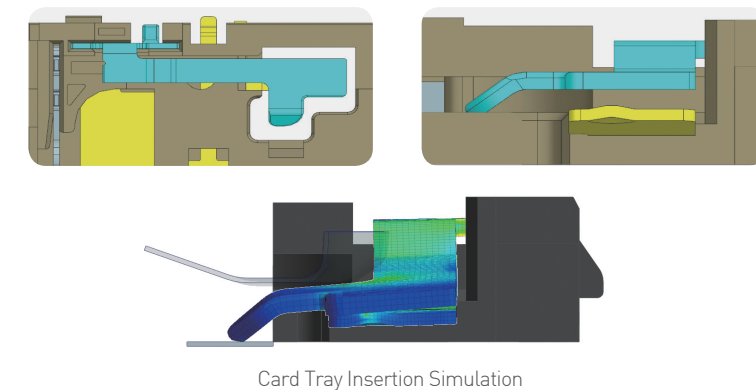
TS254-C22B-C14

FEATURES AND ADVANTAGES

- ▶ **SIM & SD Terminal deformation prevention structure**
 - Strengthen contact stability
 - Improving product quality reliability



- ▶ **Switch z-axis OFF-ON structure**
 - Normal [OPEN] → Tray inserted [CLOSE]
 - Strengthen contact stability
 - Improving product quality reliability



SIM and Memory Card Socket Connector **SN**

Mobile Connector

TS254-C22B-C14

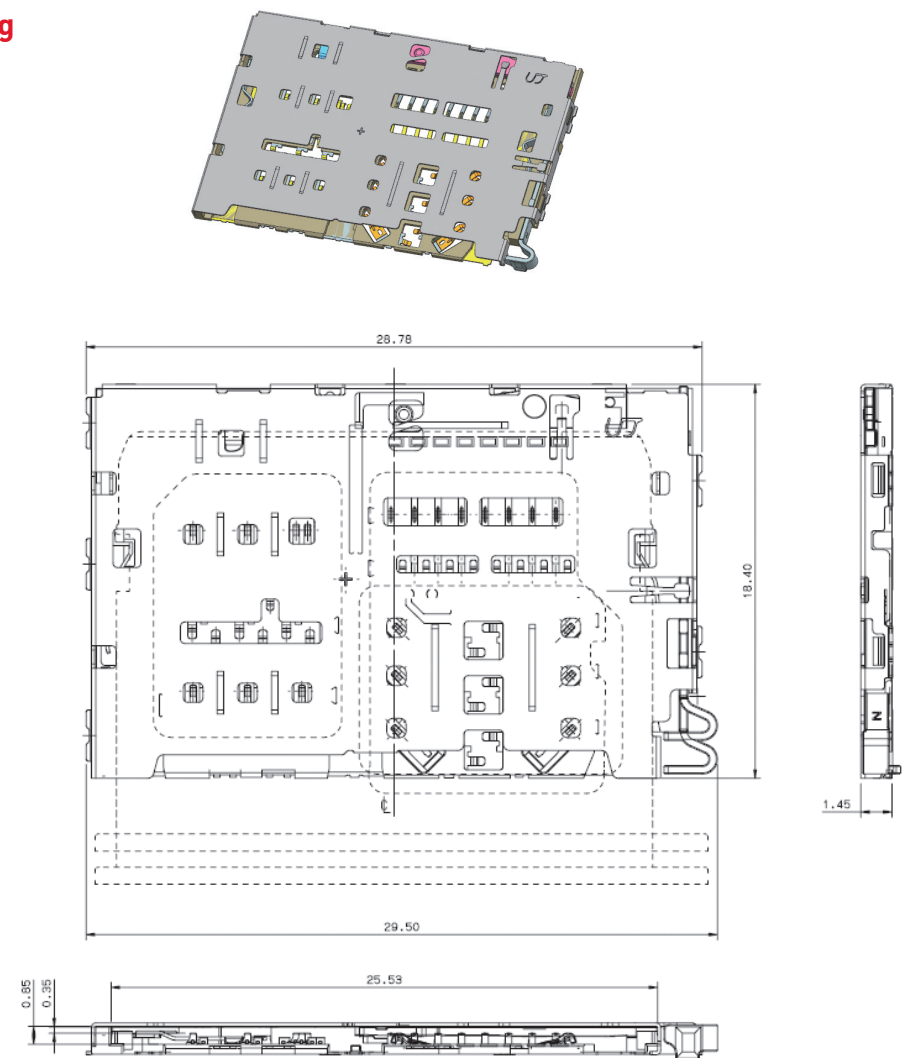
Product Number Structure

T S 254 - C 22 B - C 14

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : TRIPLE SOCKET
- ② Style : Socket
- ③ Contact Pitch : 2.54mm
- ④ Type : Shell cover
- ⑤ No. of position : 22P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting
- ⑧ Connector Height : 1.45mm

Product Drawing

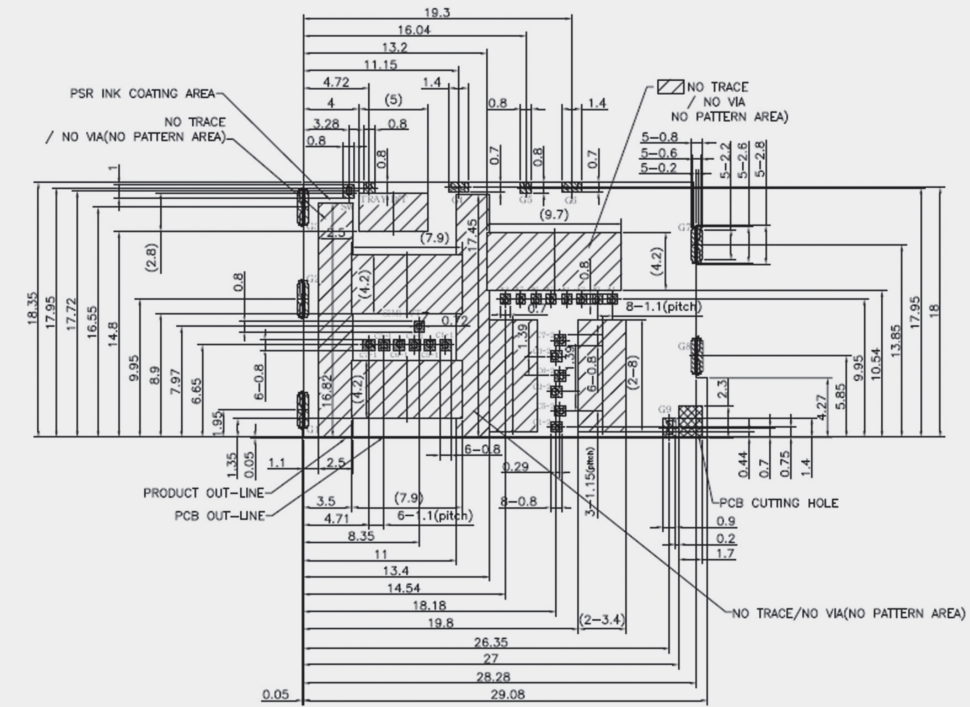


SIM and Memory Card Socket Connector **SN**

Mobile Connector

TS254-C22B-C14

Recommended PCB Dimensions

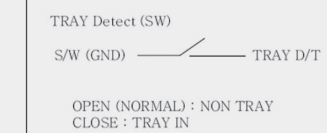


RECOMMENDED P.C.B LAYOUT (MOUNTING FACE SIDE)
ALL TOLERANCE NOT DESCRIBED ARE ±0.05
(RECOMMEND METAL MASK T=0.10mm)

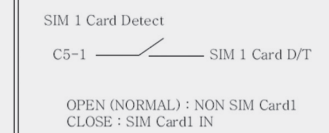
【NANO SIM CARD PIN-MAP】

Pin No.	Description
C1-1 C1-2	VCC
C2-1 C2-2	RST
C3-1 C3-2	CLK
C5-1 C5-2	GND
C6-1 C6-2	VPP
C7-1 C7-2	I/O

【COMPOSITION OF DETECTION】



【COMPOSITION OF DETECTION】



【micro SD CARD PIN-MAP】

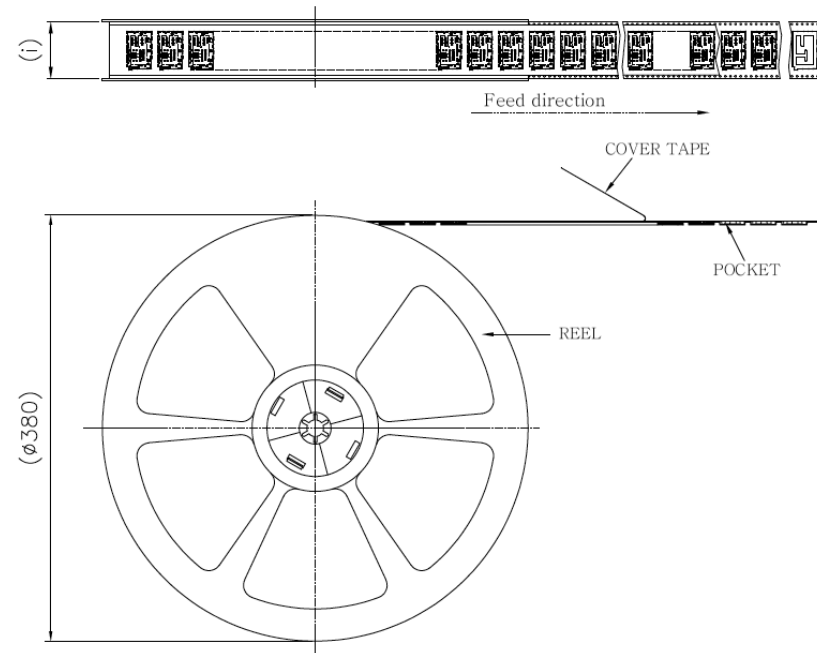
Pin No.	Description	G1-G9	GND or NOT CONNECT
#1	DAT2	SW	TRAY DETECTOR
#2	CD/DAT3	TRAY D/T	GROUND
#3	CMD	D/T	SIM DETECTOR
#4	VDD		
#5	CLK		
#6	VSS		
#7	DAT0		
#8	DAT1		

SIM and Memory Card Socket Connector **SN**

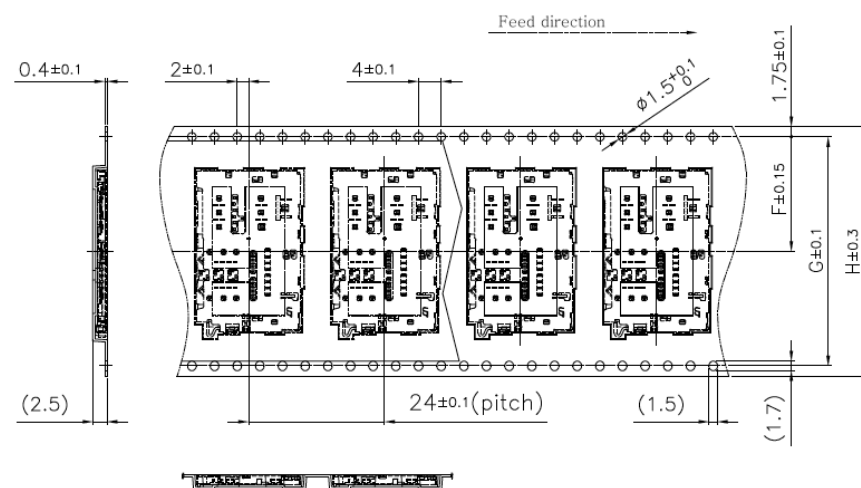
Mobile Connector

TS254-C22B-C14

Reel Dimensions



Embossed Carrier Tape Dimensions



【DIMENSION TABLE】

Product Name	Product Number	No. of Contacts	F	G	H	i
SN	DS254-C22B-C14	22	20.2	40.4	44	45.4

MICRO SIM Card Socket Connector **TS3**

Mobile Connector

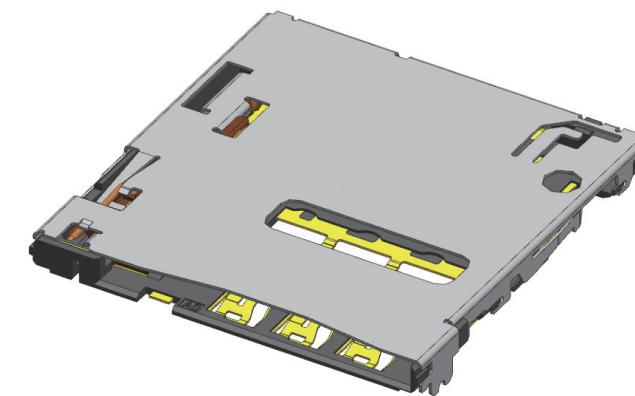
SS254-C06B-C13-B

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Push-Push Card Insertion
- ▶ Low Height



- ▶ MICRO SIM Card Socket
- ▶ Push In - Push Out (Simple Installation)
- ▶ Application structure Card Detect Switch

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	CONTACT 150mΩ [Max.] DETECT 200mΩ [Max.]	1,000MΩ [Min.]	AC 500V	-40°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	CODE
6	2.54	15.98	1.27	15.45	SS254-C06B-C13-B

MICRO SIM Card Socket Connector **TS3**

Mobile Connector

SS254-C06B-C13-B

Product Specification

Ratings	Rated current	0.5A/Pin	Operating temperature range	-40°C to +85°C 1)	Storage temperature range	- 5°C to +40°C (With packing)
	Rated voltage	AC 125V	Operating humidity range	10% to 80% RH 2)	Storage humidity range	65%RH

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	CONTACT - 150mΩ [Max.] DETECT - 200mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Card Insertion force & Withdrawal force	Initial : 500 ±200 gf After : 500 ±200 gf	- Push-pull gauge at 25±3m/min speed.
5. Vibration	- MAX. Change from Initial contact resistance 40mΩ MAX.	- Vibration frequency range : 10-55-10Hz - Total amplitude : 1.52mm - Sweep time : 30sec - Duration : 2h each (6h in total)
6. Durability	- MAX. Change from Initial contact resistance 40mΩ MAX. - Card Insertion Force & withdrawal force 500 ±200 gf	1) Attach and detach 500 times. 2) Attach and detach 2,000 times. 3) Reattach the 0.7T SD/SIM card tested in Sample No.2 and attach/detach an additional 3,000 times
7. Temperature and Humidity cycle	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- 40±3(°C) : 30 minutes → 85±2(°C) : 30 minutes, 96 cycles
8. Humidity	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Salt mist	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- Salt water concentration : 5±1% Weight ratio - Temperature : 35°C±2°C - Duration : 72h
10. Heat	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- Temperature : 105±2°Ctio - Duration : 96h

Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Terminal	Copper Alloy	Au, Ni plated	-
Cover	Stainless Steel	Au, Ni plated	-
CAM Slider	Copper Alloy	Ni plated	-
CAM Plate	LCP	Black	UL94V-0
CAM Stick	Stainless Steel	-	-
Spring	Stainless Steel	-	-
Stopper	Stainless Steel	-	-

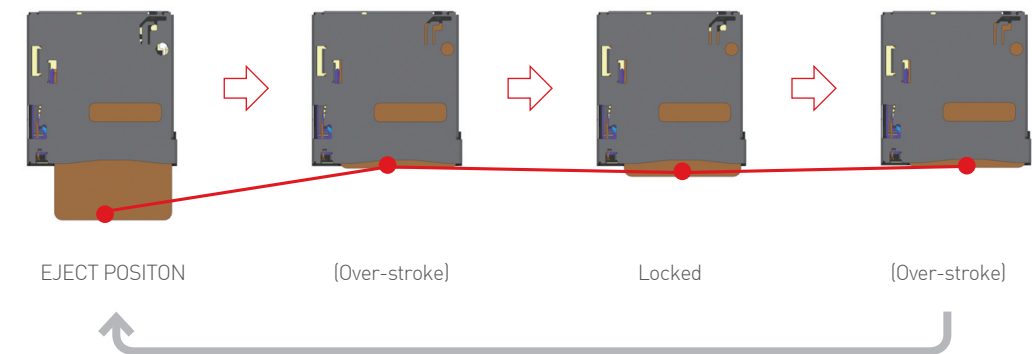
MICRO SIM Card Socket Connector **TS3**

Mobile Connector

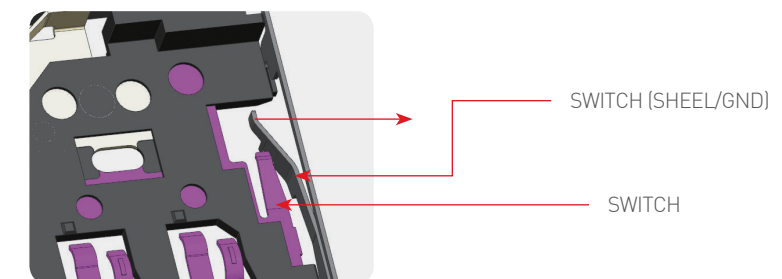
SS254-C06B-C13-B

FEATURES AND ADVANTAGES

- ▶ **CARD INSERT**
 - Easy card instalation (Push In – Push Out)
 - Improving product quality reliability



- ▶ **CARD DETECTION**
 - Strengthen contact stability
 - Improving product quality reliability



MICRO SIM Card Socket Connector TS3

Mobile Connector

SS254-C06B-C13-B

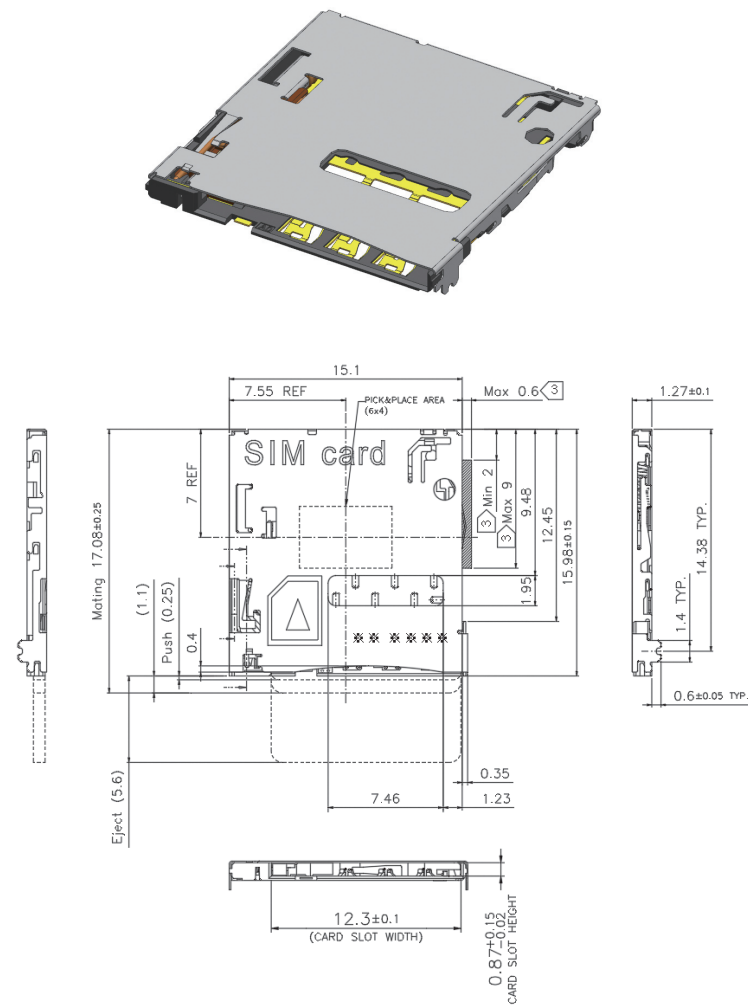
Product Number Structure

SS 254 - C 06 B - C 13 - B

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : SIM SOCKET
- ② Style : Socket
- ③ Contact Pitch : 2.54mm
- ④ Type : Shell cover
- ⑤ No. of position : 6P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting
- ⑧ Connector Height : 1.27mm
- ⑨ Option

Product Drawing

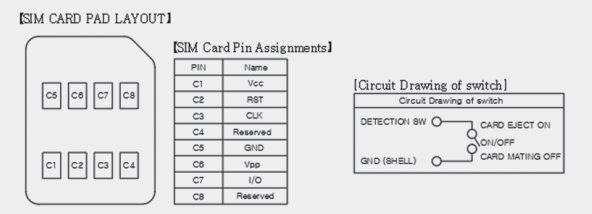
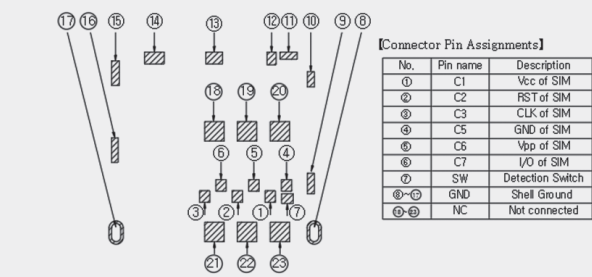
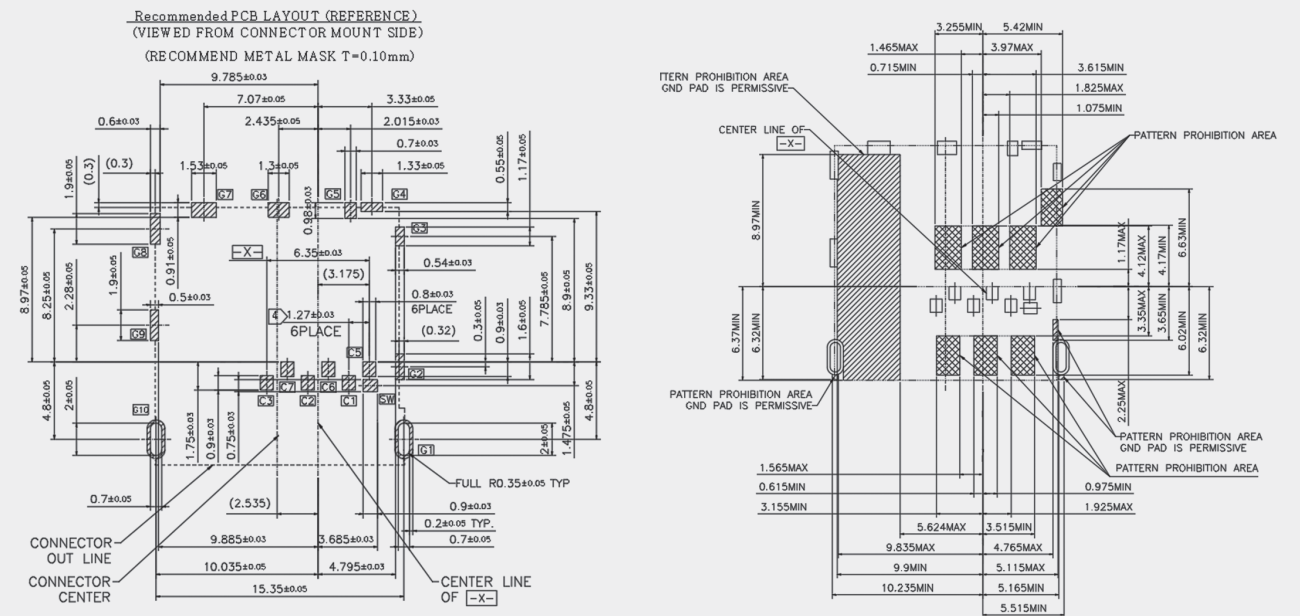


MICRO SIM Card Socket Connector TS3

Mobile Connector

SS254-C06B-C13-B

Recommended PCB Dimensions

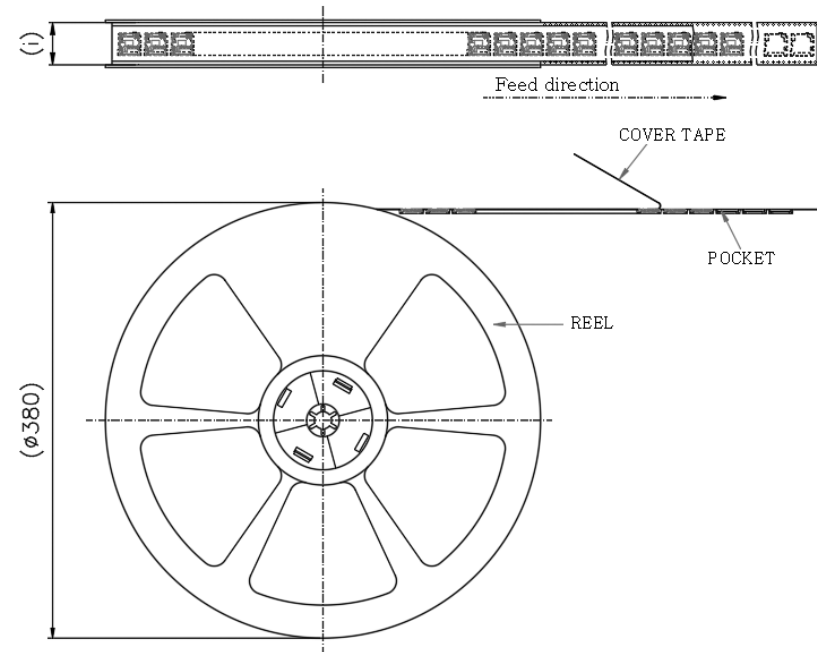


MICRO SIM Card Socket Connector **TS3**

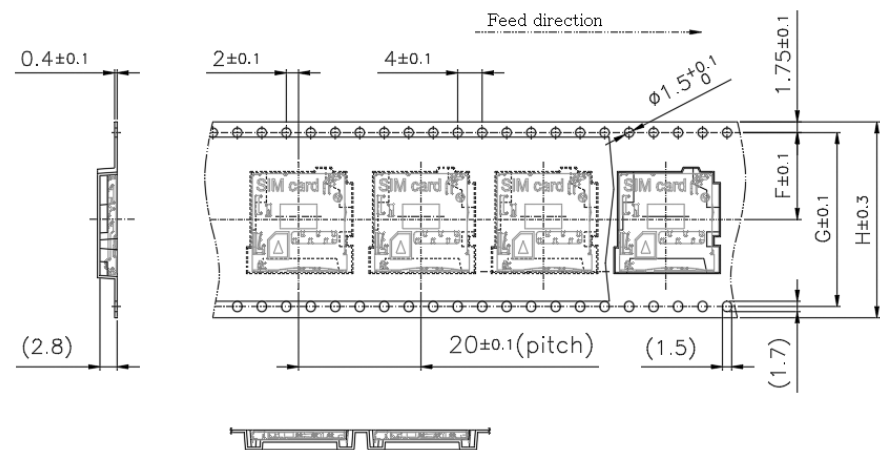
Mobile Connector

SS254-C06B-C13-B

Reel Dimensions



Embossed Carrier Tape Dimensions



[DIMENSION TABLE]

Product Name	Product Number	No. of Contacts	F	G	H	i
TS3	SS254-C06B-C13-B	6	14.2	28.4	32	33.4

NANO SIM Card Socket Connector **SM**

Mobile Connector

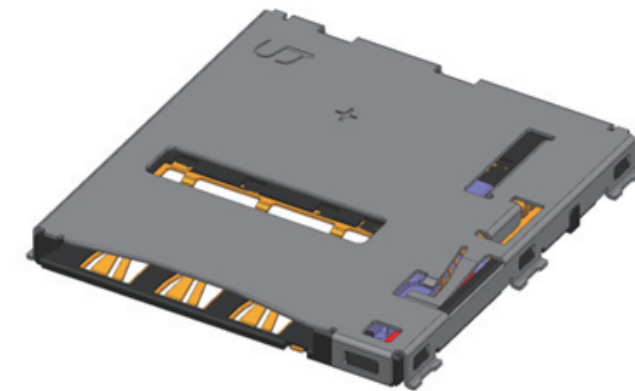
NS254-C07B-C12

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Push-Push Card Insertion
- ▶ Low Height



- ▶ NANO SIM Card Socket
- ▶ Push In - Push Out (Simple Installation)
- ▶ Application structure Card Detect Switch

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	CONTACT 150mΩ [Max.] DETECT 150mΩ [Max.]	1,000MΩ [Min.]	AC 500V	-40°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	CODE
6	2.54	13.65	1.23	13.25	NS254-C07B-C12

NANO SIM Card Socket Connector **SM**

Mobile Connector

NS254-C07B-C12

Product Specification

Ratings	Rated current	0.5A/Pin	Operating temperature range	-40°C to +85°C 1)	Storage temperature range	-5°C to +40°C (With packing)
	Rated voltage	AC 125V	Operating humidity range	10% to 80% RH 2)	Storage humidity range	65%RH

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	CONTACT - 150mΩ [Max.] DETECT - 150mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Card Insertion force & Withdrawal force	Insert : 1.0 kgf Max Withdrawal : 1.0 kgf Max	- Push-pull gauge at 25±3m/min speed.
5. Vibration	- MAX. Change from Initial contact resistance 50mΩ MAX.	- Vibration frequency range : 10-55-10Hz - Total amplitude : 1.52mm - Sweep time : 30sec - Duration : 2h each (6h in total)
6. Durability	- MAX. Change from Initial contact resistance 50mΩ MAX.	- Attach and detach 5,000 times.
7. Temperature and Humidity cycle	- MAX. Change from Initial contact resistance 50mΩ MAX. - Insulation resistance : 100MΩ Min	- 40±3[°C] : 30 minutes → 85±2[°C] : 30 minutes, 96 cycles
8. Humidity	- MAX. Change from Initial contact resistance 50mΩ MAX. - Insulation resistance : 100MΩ Min	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Salt mist	- MAX. Change from Initial contact resistance 50mΩ MAX. - Insulation resistance : 100MΩ Min	- Salt water concentration : 5±1% Weight ratio - Temperature : 35°C±2°C - Duration : 72h
10. Heat	- MAX. Change from Initial contact resistance 50mΩ MAX. - Insulation resistance : 100MΩ Min	- Temperature : 105±2°Ctio - Duration : 96h

Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Terminal	Copper Alloy	Au, Ni plated	-
Cover	Nickel silver	Au, Ni plated	-
Switch A	Copper Alloy	Au, Ni plated	-
Switch B	Copper Alloy	Au, Ni plated	-
Ejector	Stainless Steel	-	-
CAM Stick	Stainless Steel	-	-
Spring	Stainless Steel	-	-

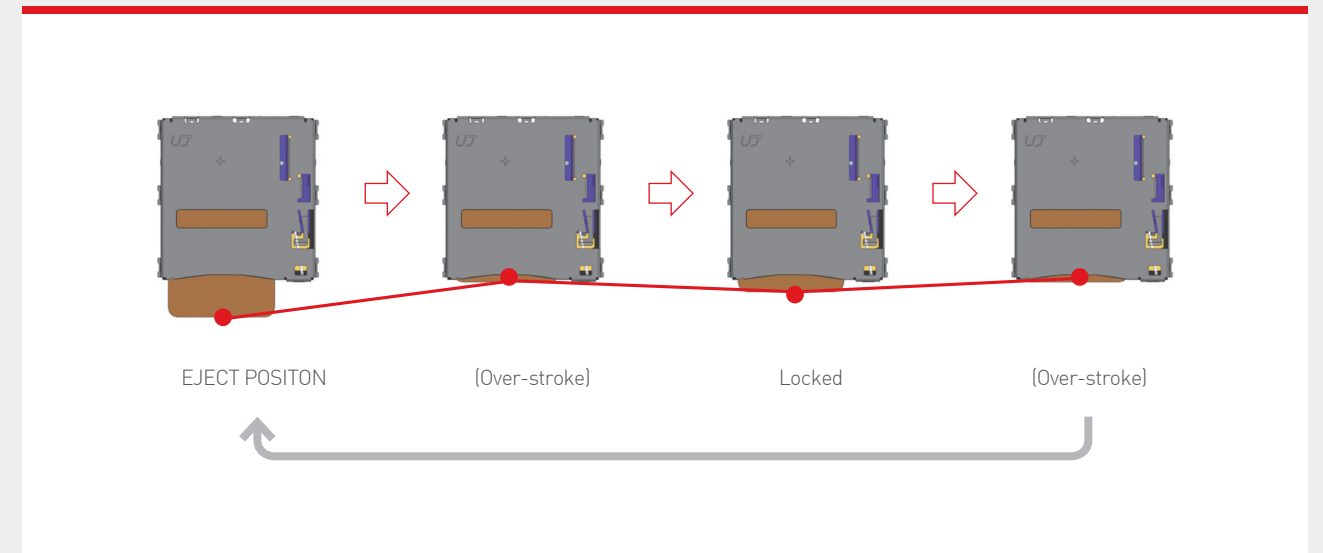
NANO SIM Card Socket Connector **SM**

Mobile Connector

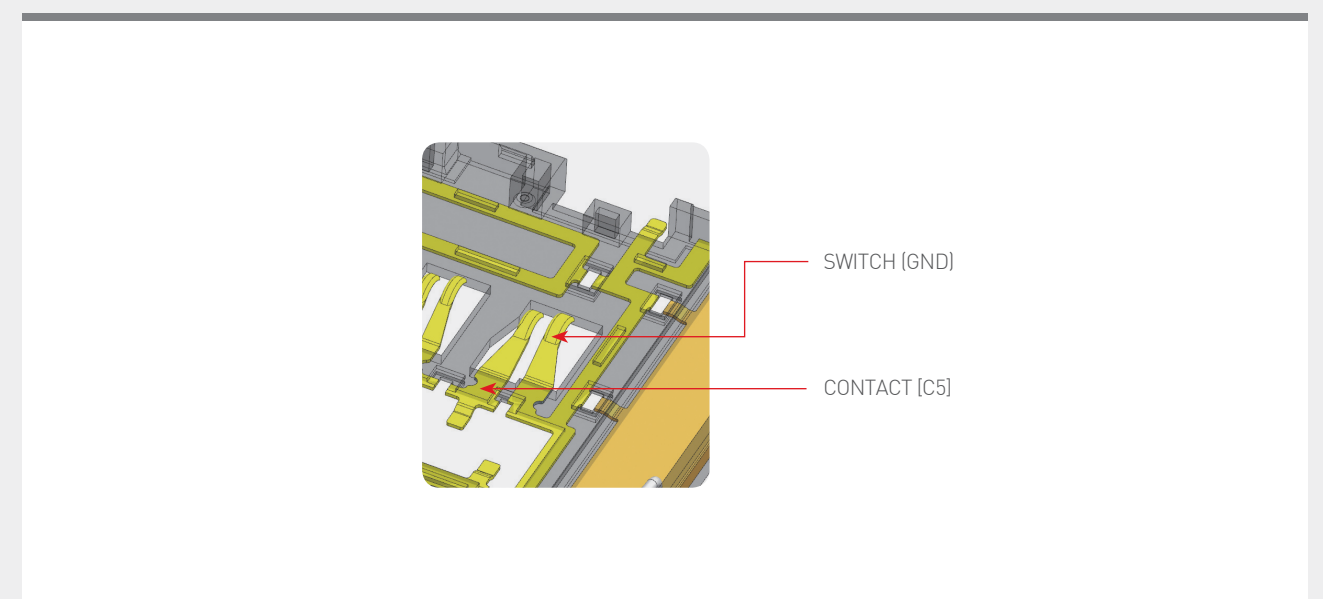
NS254-C07B-C12

FEATURES AND ADVANTAGES

- **CARD INSERT**
 - Easy card instalation (Push In – Push Out)
 - Improving product quality reliability



- **CARD DETECTION**
 - Normal [OPEN] --> Card inserted [CLOSE]
 - Improving product quality reliability



NANO SIM Card Socket Connector SM

Mobile Connector

NS254-C07B-C12

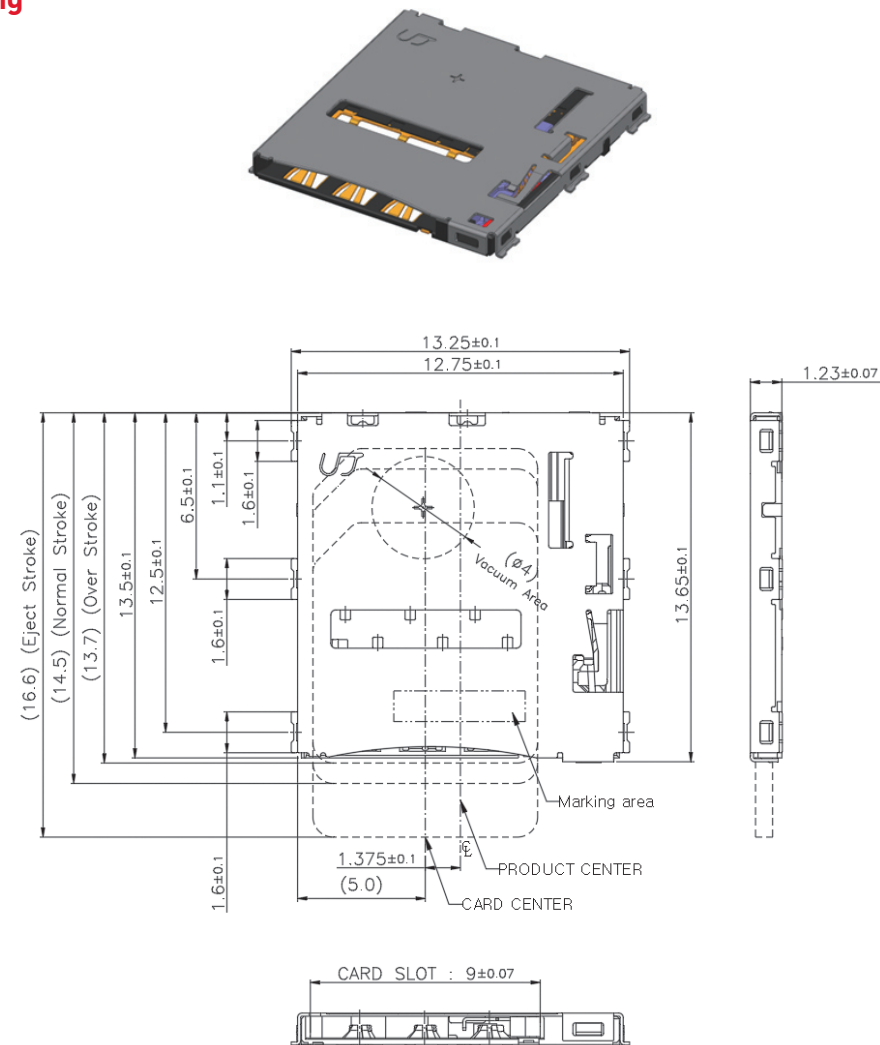
Product Number Structure

N S 254 - C 22 B - C 14

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Type of connectors : NANO SIM	② Style : Socket
③ Contact Pitch : 2.54mm	④ Type : Shell cover
⑤ No. of position : 7P	⑥ Test of on board : Board on
⑦ Shape symbol : With Fitting	⑧ Connector Height : 1.23mm

Product Drawing

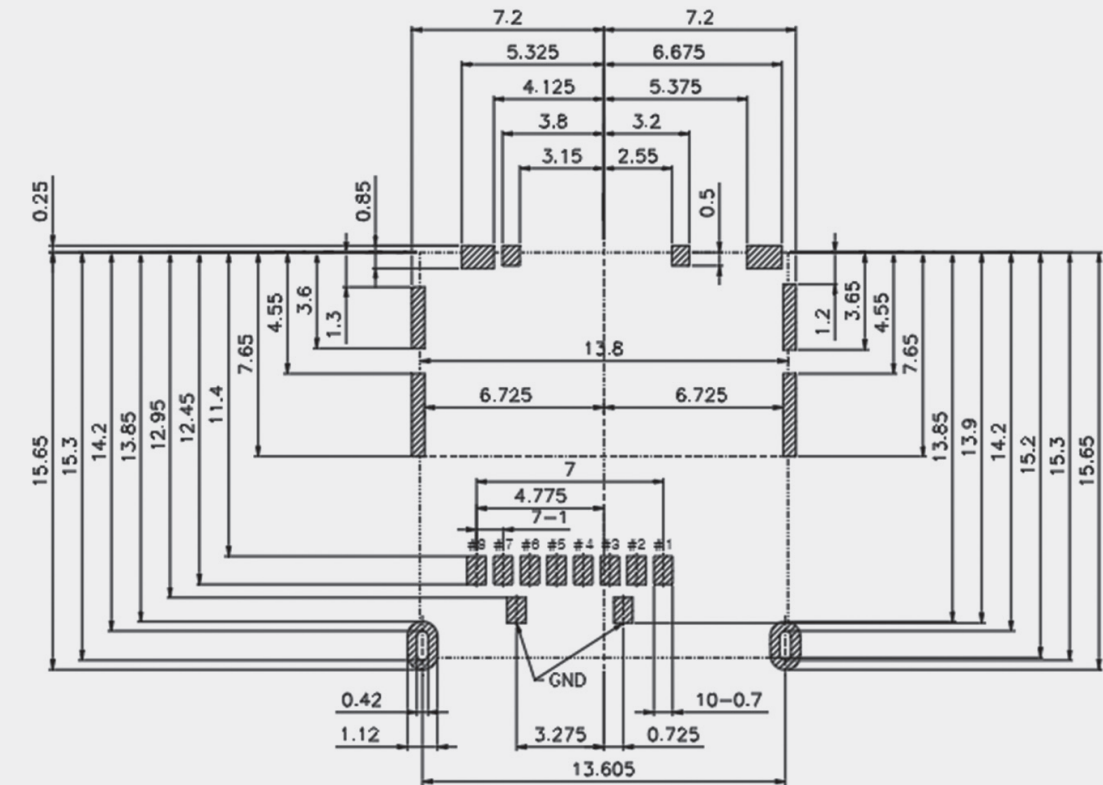


NANO SIM Card Socket Connector SM

Mobile Connector

NS254-C07B-C12

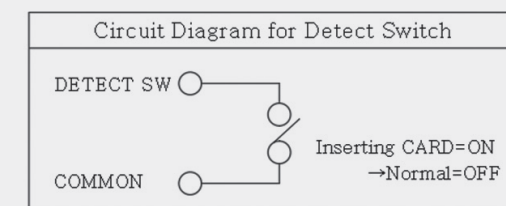
Recommended PCB Dimensions



Recommended PCB LAYOUT
TOLERANCES UNLESS OTHERWISE SPEC. ±0.05

PATTERN AREA
 NO PATTERN AREA

[Circuit Diagram for Detect Switch]



[Pin Assignments]

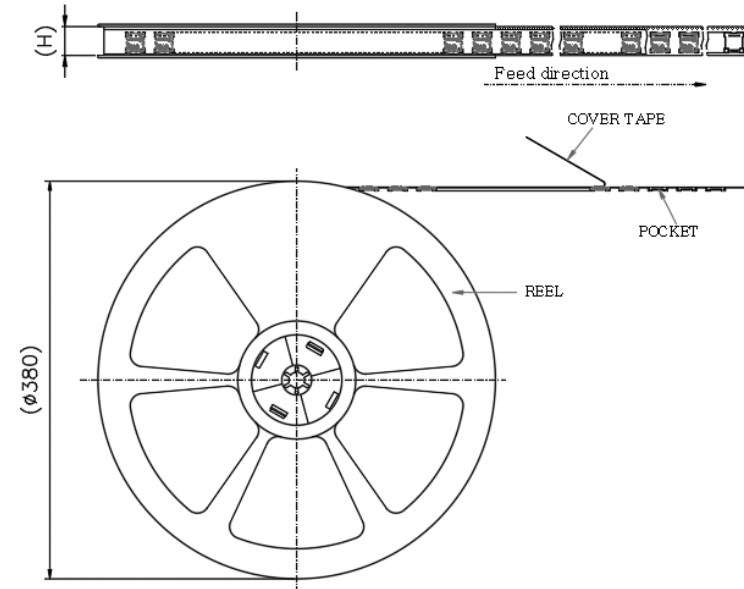
PIN	SD Mode
#1	DAT2
#2	DAT3/CD
#3	CMD
#4	VDD
#5	CLK
#6	VSS
#7	DAT0
#8	DAT1

NANO SIM Card Socket Connector **SM**

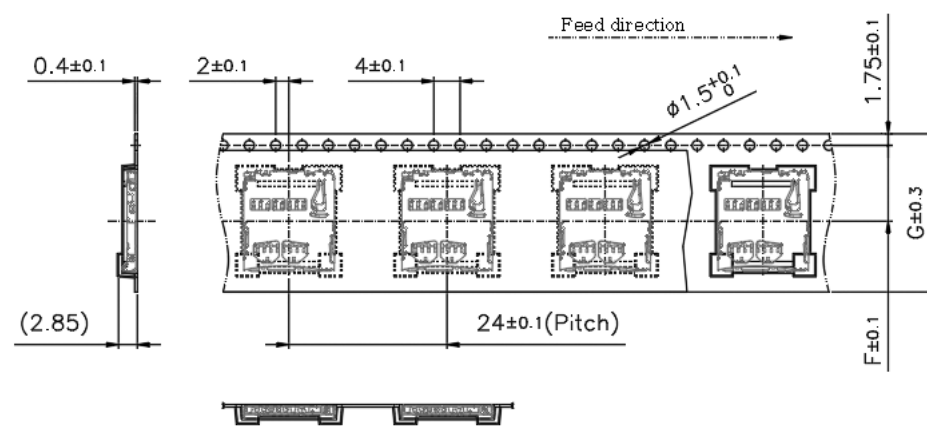
Mobile Connector

NS254-C07B-C12

Reel Dimensions



Embossed Carrier Tape Dimensions



[DIMENSION TABLE]

Product Name	Product Number	No. of Contcts	F	G	H
SD 1.36 A	MS110-C10B-C13-A	10	11.5	24	25.4

Micro-SD Card Socket Connector **micro SD 1.68**

Mobile Connector

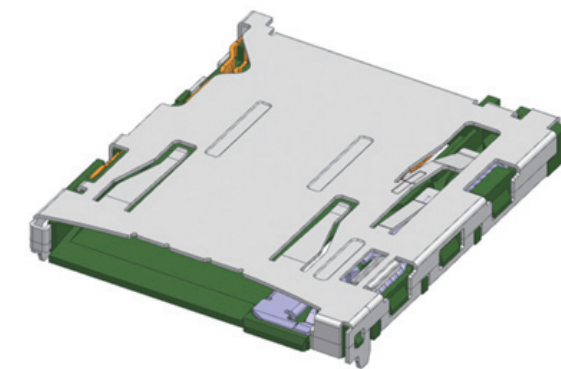
MS110-C10B-C16-H

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Push-Push Card Insertion
- ▶ Low Height



- ▶ micro-SD Card Socket
- ▶ Push In - Push Out (Simple Installation)
- ▶ Application structure Card Detect Switch

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	60mΩ [Max.]	1,000MΩ [Min.]	AC 500V	-40°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	CODE
8	1.10	15.95	1.68	13.85	MS110-C10B-C16-H

Micro-SD Card Socket Connector **micro SD 1.68**

Mobile Connector

MS110-C10B-C16-H

Product Specification

Ratings	Rated current	0.5A/Pin	Operating temperature range	-40°C to +85°C 1)	Storage temperature range	-5°C to +40°C (With packing)
	Rated voltage	AC 125V	Operating humidity range	10% to 80% RH 2)	Storage humidity range	65%RH

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	60mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Card Insertion force & Withdrawal force	Initial : 500 ±200 gf After : 500 ±200 gf	- Push-pull gauge at 25±3m/min speed.
5. Vibration	- MAX. Change from Initial contact resistance 40mΩ MAX.	- Vibration frequency range : 10-55-10Hz - Total amplitude : 1.52mm - Sweep time : 30sec - Duration : 2h each (6h in total)
6. Durability	- MAX. Change from Initial contact resistance 40mΩ MAX. - Card Insertion Force & withdrawal force 500 ±200 gf	- Attach and detach 10,000 times. - Attach and detach 600 time / Hr or less
7. Temperature and Humidity cycle	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- 40±3(°C) : 30 minutes → 85±2(°C) : 30 minutes, 96 cycles
8. Humidity	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Salt mist	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- Salt water concentration : 5±1% Weight ratio - Temperature : 35°C±2°C - Duration : 72h
10. Heat	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- Temperature : 105±2°Ctio - Duration : 96h

Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Terminal	Copper Alloy	Au, Ni plated	-
Cover	Nickel silver	Au, Ni plated	-
Switch A	Copper Alloy	Au, Ni plated	-
Switch B	Copper Alloy	Au, Ni plated	-
Ejector	Stainless Steel	-	-
CAM Stick	Stainless Steel	-	-
Spring	Stainless Steel	-	-

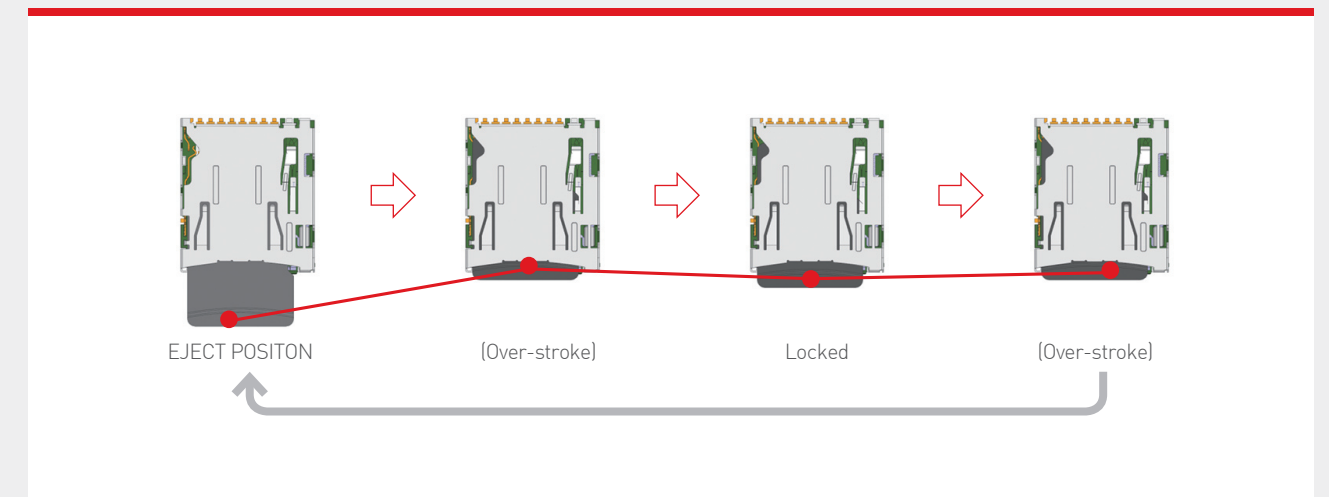
Micro-SD Card Socket Connector **micro SD 1.68**

Mobile Connector

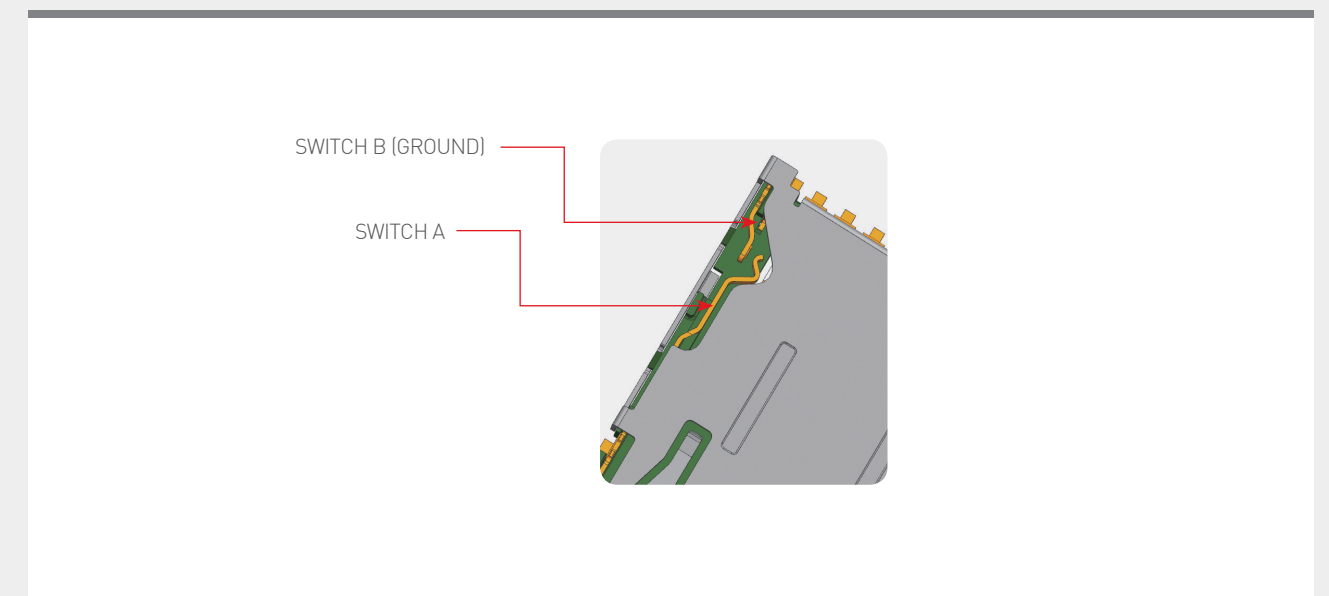
MS110-C10B-C16-H

FEATURES AND ADVANTAGES

- ▶ **CARD INSERT**
 - Easy card instalation (Push In – Push Out)
 - Improving product quality reliability



- ▶ **CARD DETECTION**
 - Normal [OPEN] --> Card inserted [CLOSE]
 - Strengthen contact stability
 - Improving product quality reliability

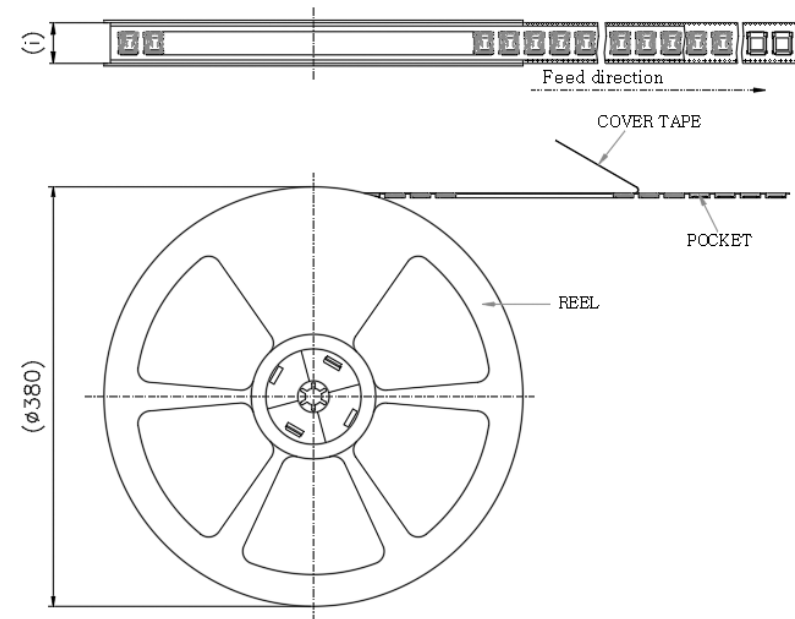


Micro-SD Card Socket Connector **micro SD 1.68**

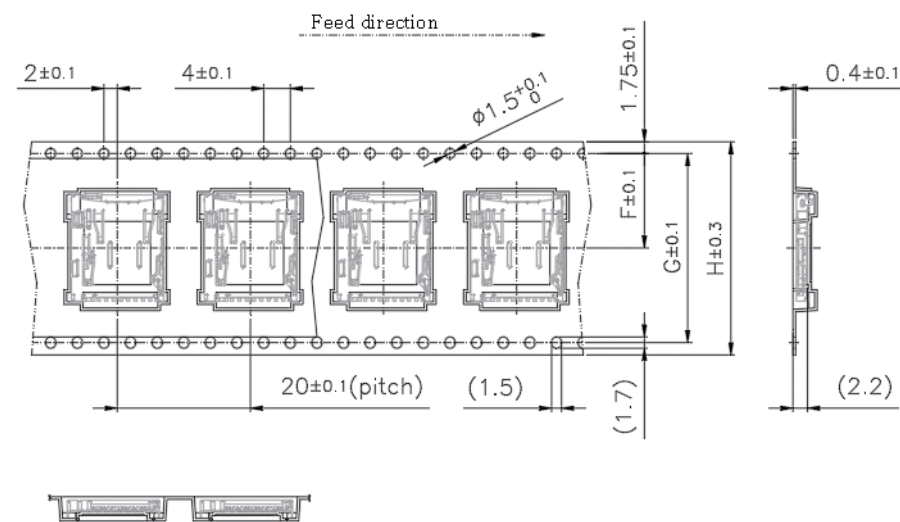
Mobile Connector

MS110-C10B-C16-H

Reel Dimensions



Embossed Carrier Tape Dimensions



【DIMENSION TABLE】

Product Name	Product Number	No. of Contacts	F	G	H	i
SD 1.68 A	MS110-C10B-C16-A	10	14.2	28.4	32	33.4

Micro-SD Card Socket Connector **micro SD 1.36**

Mobile Connector

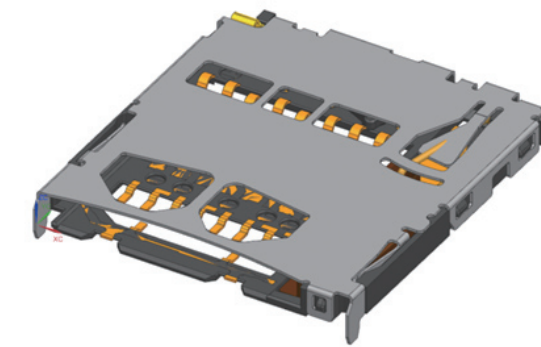
MS110-C10B-C13-A

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Push-Push Card Insertion
- ▶ Low Height



- ▶ micro-SD Card Socket
- ▶ Push In - Push Out (Simple Installation)
- ▶ Application structure Card Detect Switch

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	60mΩ [Max.]	1,000MΩ [Min.]	AC 500V	-40°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	CODE
8	1.10	15.95	1.68	13.85	MS110-C10B-C16-H

Micro-SD Card Socket Connector **micro SD 1.36**

Mobile Connector

MS110-C10B-C13-A

Product Specification

Ratings	Rated current	0.5A/Pin	Operating temperature range	-40°C to +85°C 1)	Storage temperature range	-5°C to +40°C (With packing)
	Rated voltage	AC 125V	Operating humidity range	10% to 80% RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	60mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Card Insertion force & Withdrawal force	Initial : 500 ±200 gf After : 500 ±200 gf	- Push-pull gauge at 25±3m/min speed.
5. Vibration	- MAX. Change from Initial contact resistance 40mΩ MAX.	- Vibration frequency range : 10-55-10Hz - Total amplitude : 1.52mm - Sweep time : 30sec - Duration : 2h each (6h in total)
6. Durability	- MAX. Change from Initial contact resistance 40mΩ MAX. - Card Insertion Force & withdrawal force 500 ±200 gf	- Attach and detach 10,000 times. - Attach and detach 600 time / Hr or less
7. Temperature and Humidity cycle	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- 40±3(°C) : 30 minutes → 85±2(°C) : 30 minutes, 96 cycles
8. Humidity	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Salt mist	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- Salt water concentration : 5±1% Weight ratio - Temperature : 35°C±2°C - Duration : 72h
10. Heat	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- Temperature : 105±2°Ctio - Duration : 96h

Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Terminal	Copper Alloy	Au, Ni plated	-
Cover	Nickel silver	Au, Ni plated	-
Switch A	Copper Alloy	Au, Ni plated	-
Switch B	Copper Alloy	Au, Ni plated	-
Ejector	Stainless Steel	-	-
CAM Stick	Stainless Steel	-	-
Spring	Stainless Steel	-	-

Micro-SD Card Socket Connector **micro SD 1.36**

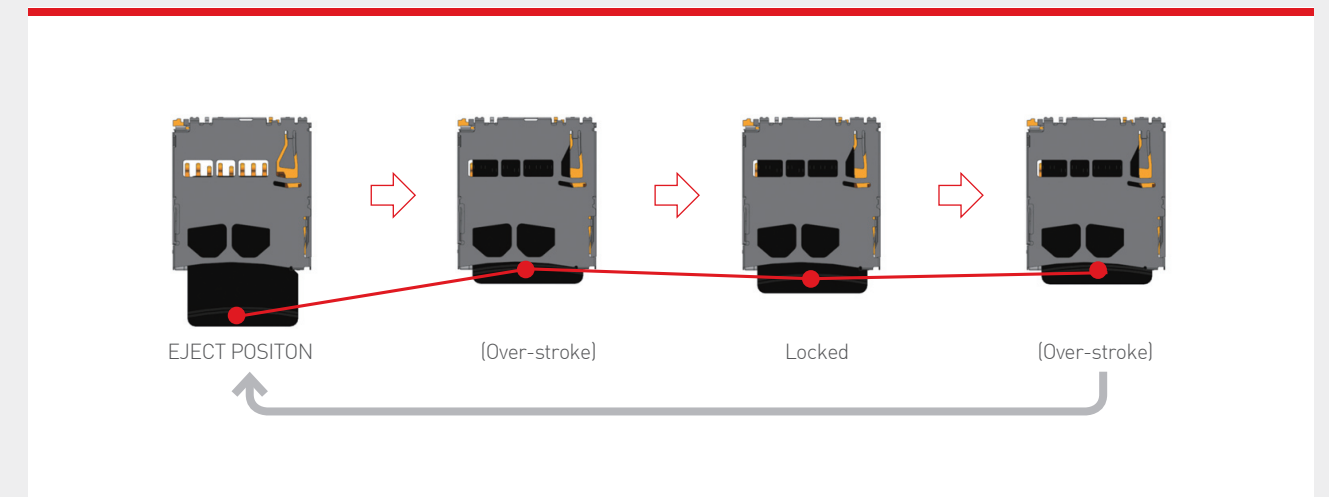
Mobile Connector

MS110-C10B-C13-A

FEATURES AND ADVANTAGES

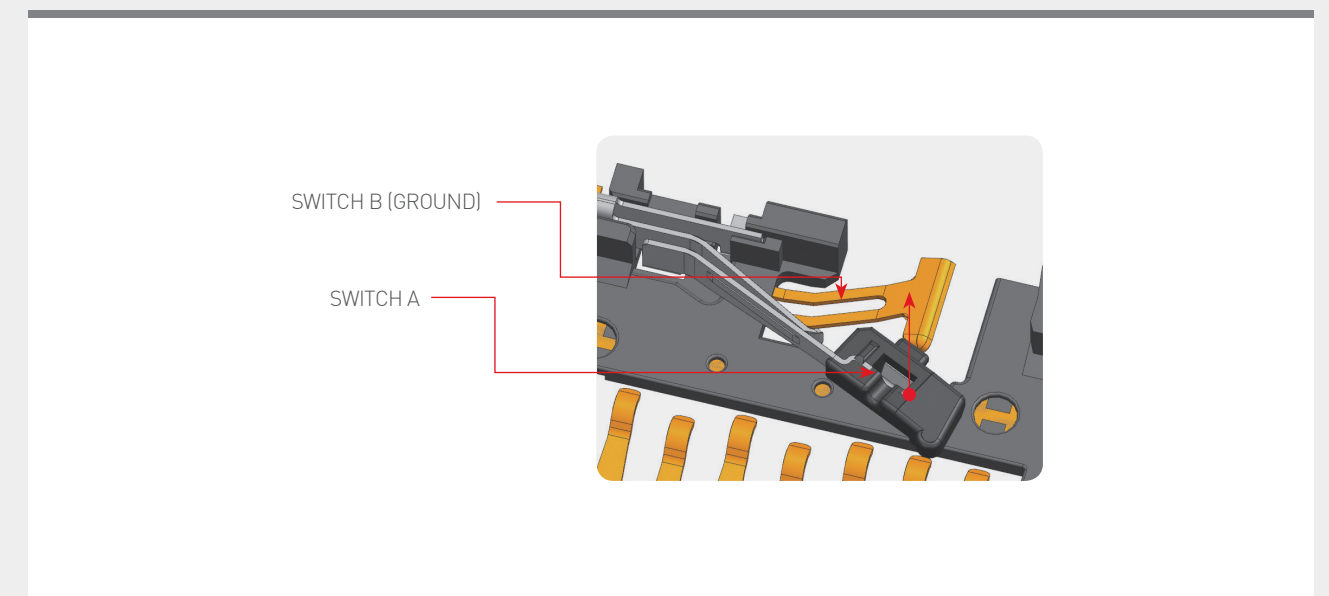
► CARD INSERT

- Easy card instalation (Push In – Push Out)
- Improving product quality reliability



► CARD DETECTION

- Normal [OPEN] --> Card inserted [CLOSE]
- Strengthen contact stability
- Improving product quality reliability



Micro-SD Card Socket Connector **micro SD 1.36**

Mobile Connector

MS110-C10B-C13-A

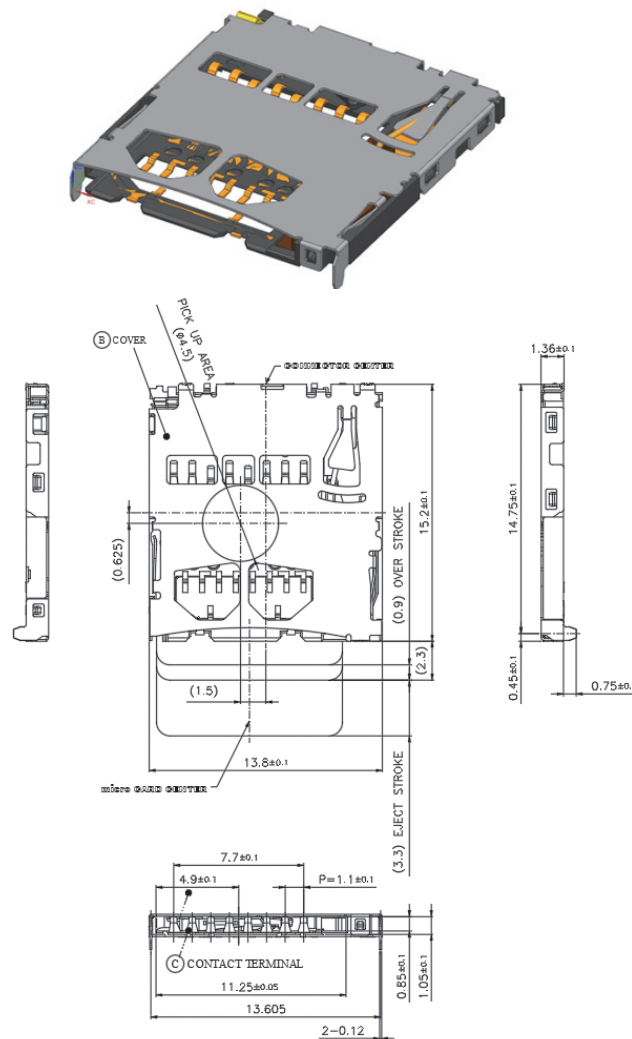
Product Number Structure

MS 110 - C 10 B - C 13 - A

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : MEMORY SOCKET
- ② Style : Socket
- ③ Contact Pitch : 1.10mm
- ④ Type : Shell cover
- ⑤ No. of position : 10P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting
- ⑧ Connector Height : 1.36mm
- ⑨ Option

Product Drawing

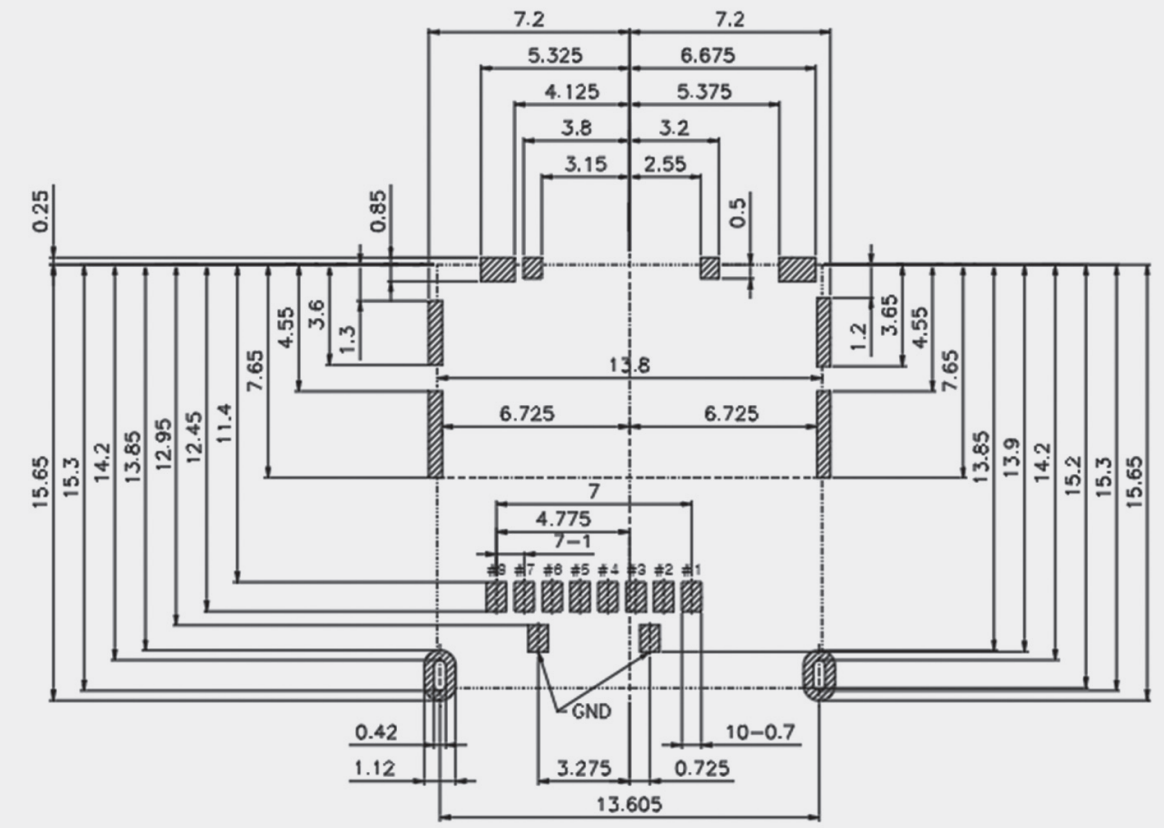


Micro-SD Card Socket Connector **micro SD 1.36**

Mobile Connector

MS110-C10B-C13-A

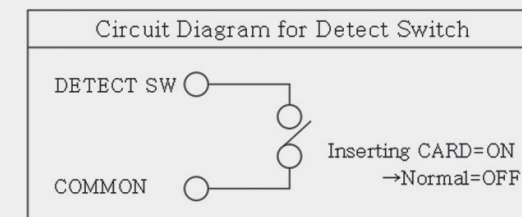
Recommended PCB Dimensions



Recommended PCB LAYOUT
TOLERANCES UNLESS OTHERWISE SPEC. ±0.05

▨ PATTERN AREA
□ NO PATTERN AREA

[Circuit Diagram for Detect Switch] [Pin Assignments]



PIN	SD Mode
#1	DAT2
#2	DAT3/CD
#3	CMD
#4	VDD
#5	CLK
#6	VSS
#7	DAT0
#8	DAT1

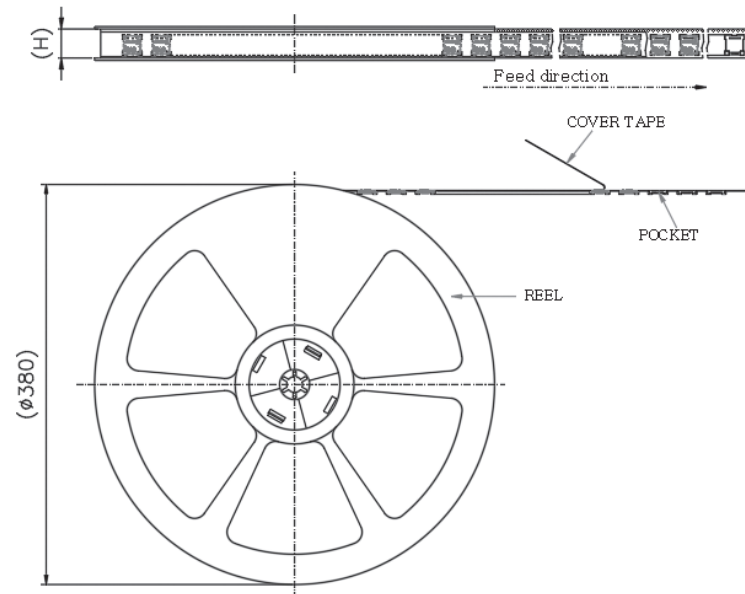
Micro-SD Card Socket Connector

micro SD 1.36

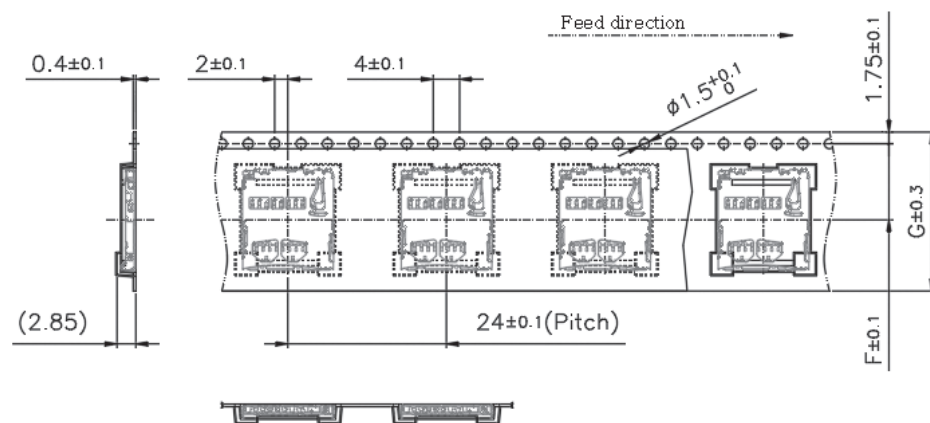
Mobile Connector

MS110-C10B-C13-A

Reel Dimensions



Embossed Carrier Tape Dimensions



[DIMENSION TABLE]

Product Name	Product Number	No. of Contacts	F	G	H
SD 1.36 A	MS110-C10B-C13-A	10	11.5	24	25.4

SIM and Memory Card Socket Connector

S05

Mobile Connector

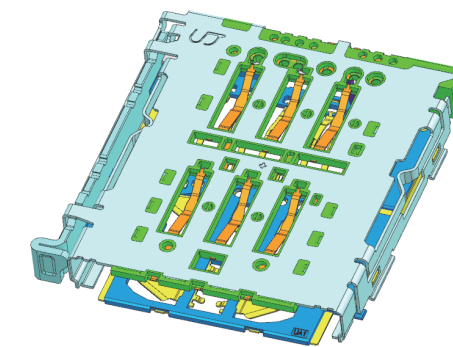
TS254-C21B-C26-A

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Combo Stacked 3in2 (microSD & nano-SIM) Socket
- ▶ Pin-Eject Tray Type
- ▶ Assembled Type



- ▶ 3in2 Stack Mold Tray Socket
- ▶ SD & SIM Terminal deformation prevention structure
- ▶ TRAY reverse insertion prevention structure
- ▶ Switch ON-OFF Structure
- ▶ All-in-one Cover & Latch

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	100mΩ [Max.]	1,000MΩ [Min.]	AC 500V	-40°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	CODE
21	2.54	16.18	2.58	17.73	TS254-C21B-C26-A

SIM and Memory Card Socket Connector **S05**

Mobile Connector

TS254-C21B-C26-A

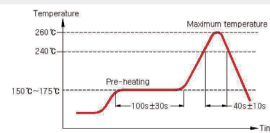
Product Specification

Ratings	Rated current	0.2A Max	Operating temperature range	-40°C to +85°C 1)	Storage temperature range	-5°C to +40°C (With packing)
	Rated voltage	Max 10V AC(RMS) or DC	Operating humidity range	10% to 80% RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	100mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Tray insert force	1,000gf [Max.]	Insert the tray at a rate of 25±3 mm/min. (actual card used)
5. Rod withdrawal force	- SIM1+SIM2 : 400~1200gf - SIM1+SD : 400~1300gf	- Press Rod with a pin. (Speed 25 mm/min) - Measure the force at the third time when the actual use card is mounted.
6. Durability	1) Check whether the SIM card terminal surface is split and the card terminal is short. 2) contact resistance - Max 100mΩ 3) Pin removal force (2,000 times) - SIM1+SIM2 : 400~1200gf - SIM1+SD : 400~1300gf	1) Attach and detach 500 times. 2) Attach and detach 2,000 times. 3) Reattach the 0.7T SD/SIM card tested in Sample No.2 and attach/detach an additional 3,000 times
7. Vibration	Discontinuity : 1.0 microsec. MAX.	- Acceleration : 50G (490%) - Duration : 11ms - Number of shocks : 3 both axial directions, 3 times each, 18 times in total - Test voltage : 5V d.c. - Test current : 1mA d.c.
8. Shock	No damage or mechanical defect No interruption over 1μ sec. No FPC drop out	On concrete : 1.8m Height, six axis 3 times, 150g total weight On tile : 0.1m Height, XYZ axis 3,500 times, 150g total weight
9. Humidity	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	No damage or mechanical defect Contact resistance : 120mΩ Max. / contact Insulation Resistance : 50MΩ Min.	- 40±3(°C) : 30 minutes → 85±2(°C) : 30 minutes, 96 cycles
11. Solder heat resistance	- No have something wrong of push functions. - No have deformation and fall off. - No have something wrong outward appearance and structure.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base A	LCP	Black	UL94V-0
Terminal A	Copper Alloy	Au-Pd , Ni plated	-
Base B	LCP	Black	UL94V-0
Terminal B	Copper Alloy	Au-Pd , Ni plated	-
Cover	Stainless Steel	Ni plated	-
Switch	Copper Alloy	Au-Pd , Ni plated	-
Eject Rod	Stainless Steel	-	-
Lever	Stainless Steel	-	-

SIM and Memory Card Socket Connector **S05**

Mobile Connector

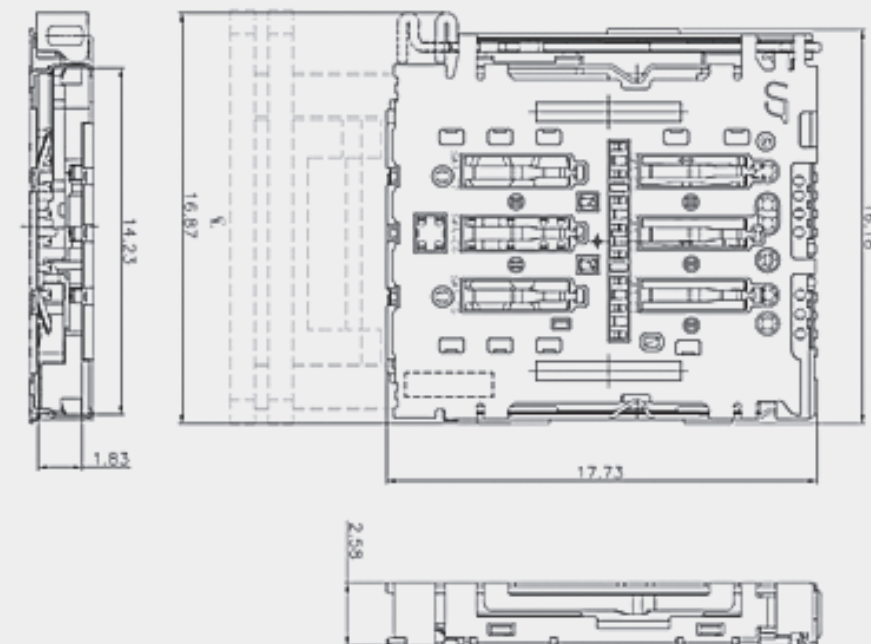
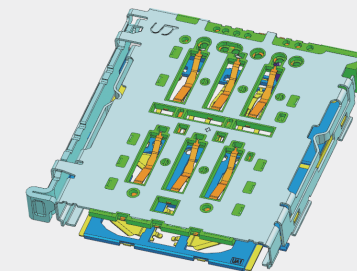
TS254-C21B-C26-A

Product Number Structure

T S 254 - C 21 B - C 26 - A
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : TRIPLE SOCKET
- ② Style : Socket
- ③ Contact Pitch : 2.54mm
- ④ Type : Shell cover
- ⑤ No. of position : 21P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting
- ⑧ Connector Height : 2.58mm
- ⑨ Option

Product Drawing



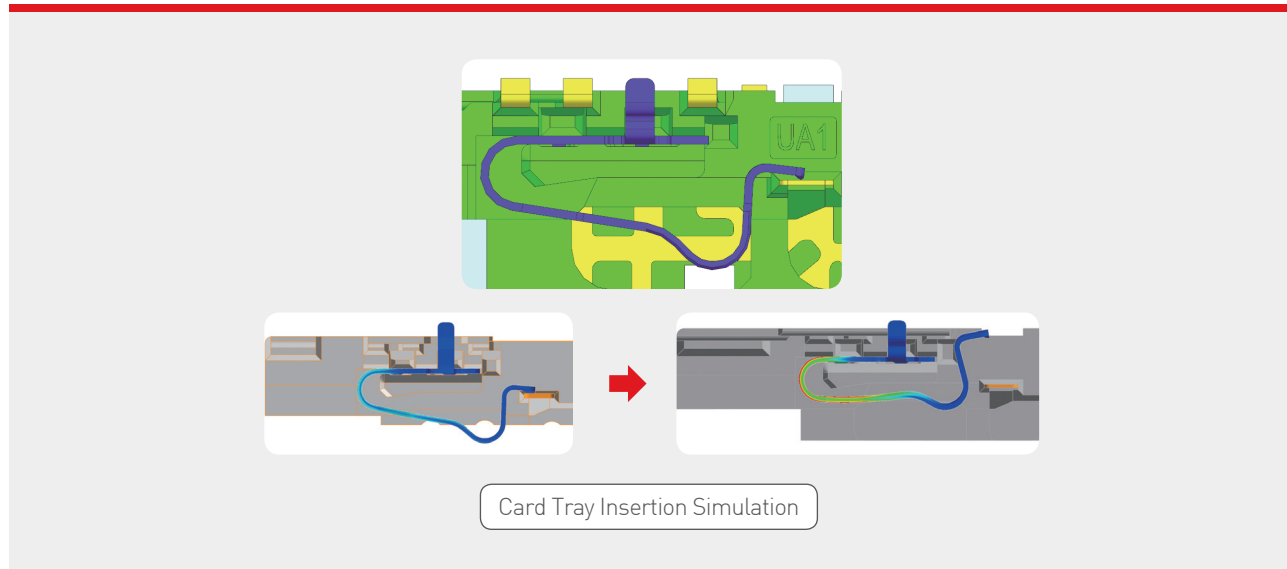
SIM and Memory Card Socket Connector **S05**

Mobile Connector

TS254-C21B-C26-A

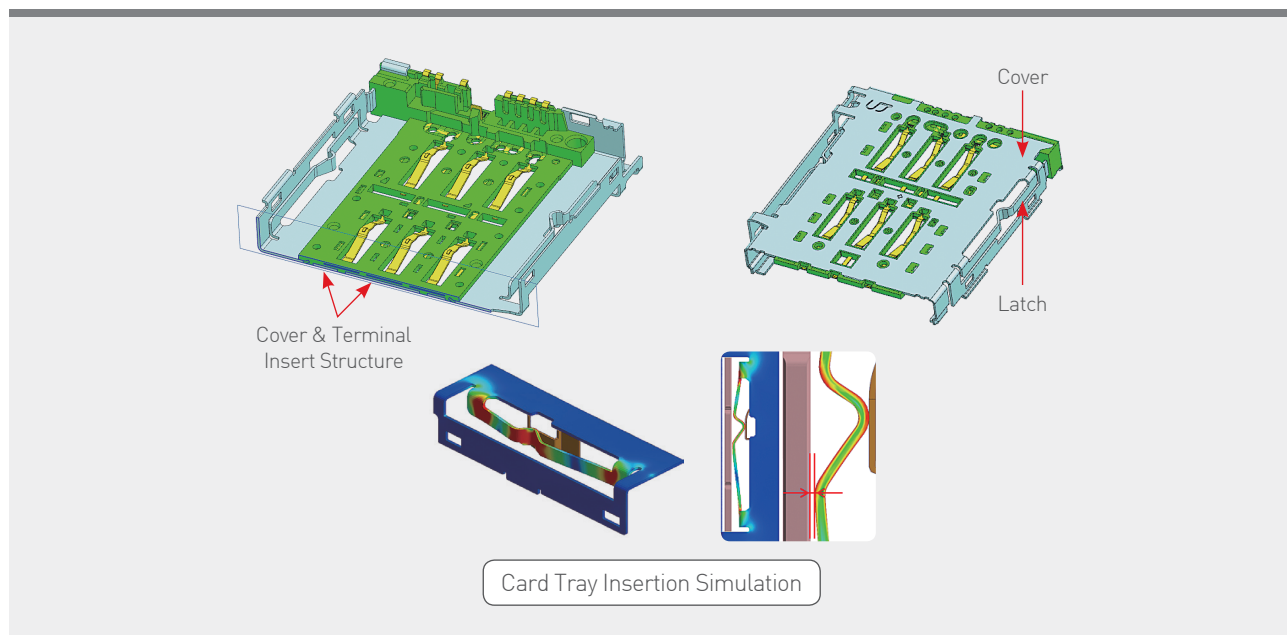
3. Switch y-axis ON-OFF structure

- ▶ Normal [CLOSE] → Tray inserted [OPEN]
- ▶ Strengthen contact stability
- ▶ Improving product quality reliability



4. Cover & Terminal full insert Injection molding, Cover & Latch all in one structure

- ▶ Improving product strength
- ▶ Improving product quality reliability



SIM and Memory Card Socket Connector **S06**

Mobile Connector

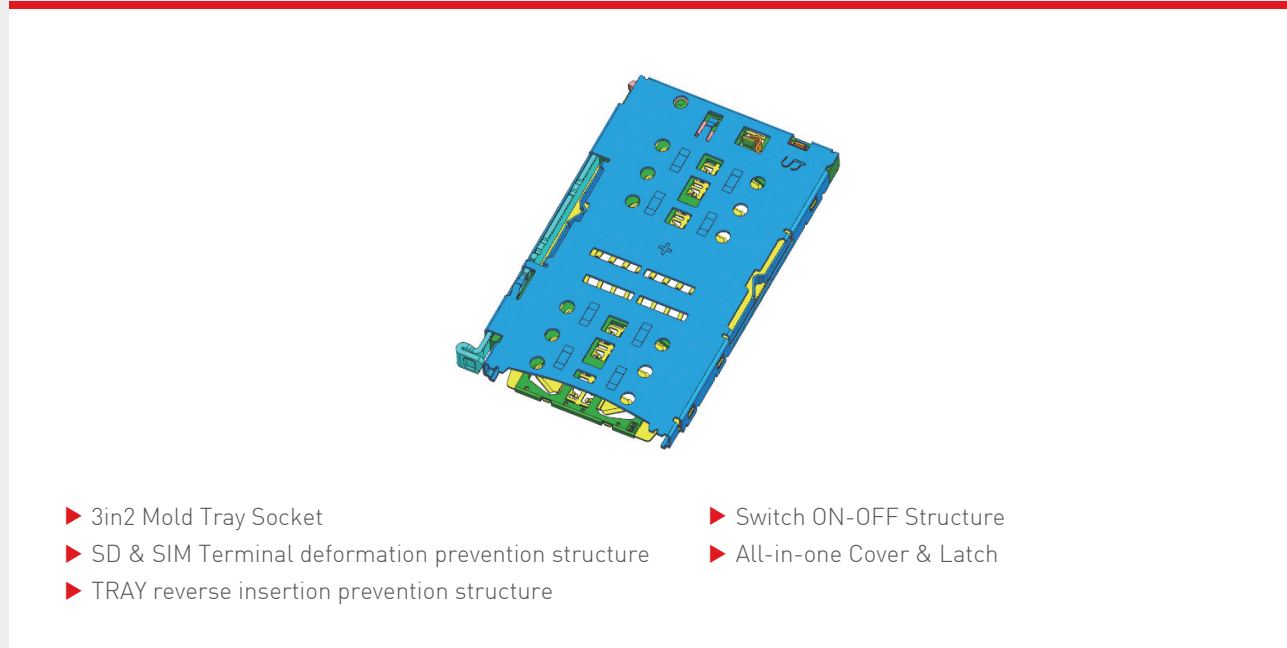
TS254-C21B-C14-A

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Combo 3in2 (microSD & nano-SIM) Socket
- ▶ Pin-Eject Tray Type
- ▶ Assembled Type



Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	100mΩ [Max.]	1,000mΩ [Min.]	AC 500V	-40°C ~ 85°C

Materials

Base	Terminal	COVER	SWITCH	EJECT ROD	LEVER
LCP	Copper Alloy	Stainless Steel	Copper Alloy	Stainless Steel	Stainless Steel

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	CODE
21	2.54	16.74	1.35	26.75	TS254-C21B-C14-A

SIM and Memory Card Socket Connector **S06**

Mobile Connector

TS254-C21B-C14-A

Product Specification

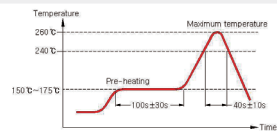
Ratings	Rated current	0.5A Max	Operating temperature range	-40°C to +85°C 1)	Storage temperature range	- 5°C to +40°C (With packing)
	Rated voltage	Max 10V AC(RMS) or DC	Operating humidity range	10% to 80% RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	100mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Tray insert force	1,000gf [Max.]	Insert the tray at a rate of 25±3 mm/min. (actual card used)
5. Rod withdrawal force	- SIM1+SIM2 : 400-1200gf - SIM1+SD : 400-1300gf	- Press Rod with a pin. (Speed 25 mm/min) - Measure the force at the third time when the actual use card is mounted.
6. Durability	1) Check whether the SIM card terminal surface is split and the card terminal is short. 2) contact resistance - Max 100mΩ 3) Pin removal force (2,000 times) - SIM1+SIM2 : 400-1200gf - SIM1+SD : 400-1300gf	1) Attach and detach 500 times. 2) Attach and detach 2,000 times. 3) Reattach the 0.7T SD/SIM card tested in Sample No.2 and attach/detach an additional 3,000 times
7. Vibration	Discontinuity : 1.0 microsec. MAX.	- Acceleration : 50G (490%) - Duration : 11ms - Number of shocks : 3 both axial directions, 3 times each, 18 times in total - Test voltage : 5V d.c. - Test current : 1mA d.c.
8. Shock resistance	Discontinuity : 1.0 microsec. MAX.	On concrete : 1.8m Height, six axis 3 times, 150g total weight On tile : 0.1m Height, XYZ axis 3,500 times, 150g total weight
9. Humidity	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- 40±3(°C) : 30 minutes → 85±2(°C) : 30 minutes, 96 cycles

11. Solder heat resistance
 - No have something wrong of push functions.
 - No have deformation and fall off.
 - No have something wrong outward appearance and structure.



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Terminal	Copper Alloy	Au-Pd, Ni plated	-
Cover	Stainless Steel	Ni plated	-
Switch	Copper Alloy	Au-Pd, Ni plated	-
Eject Rod	Stainless Steel	-	-
Lever	Stainless Steel	-	-

SIM and Memory Card Socket Connector **S06**

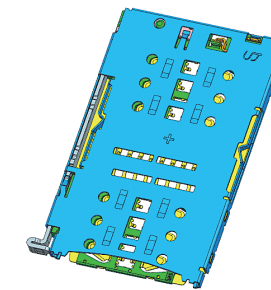
Mobile Connector

TS254-C21B-C14-A

FEATURES AND ADVANTAGES

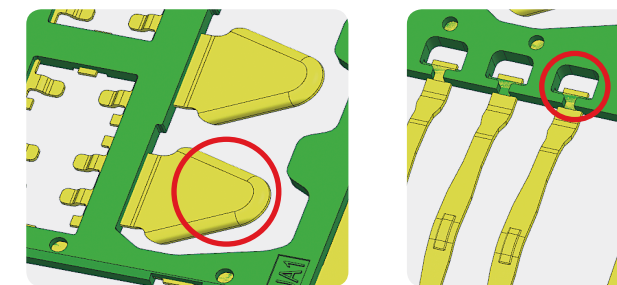
1. Minimum size Combo 3in2 (microSD & nano-SIM) Assembled Type Socket

- ▶ Easy to manage inventory control
- ▶ Easy to manage product solder twist (one assembly)



2. SIM & SD Terminal deformation prevention structure

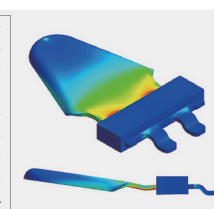
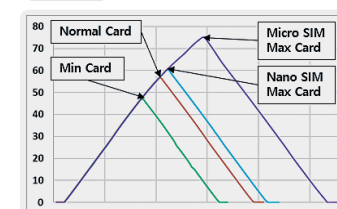
- ▶ Strengthen contact stability
- ▶ Improving product quality reliability



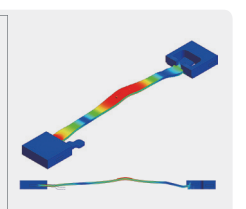
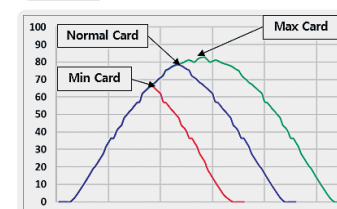
Triangle

Insert Mold

SIM1,2



SD



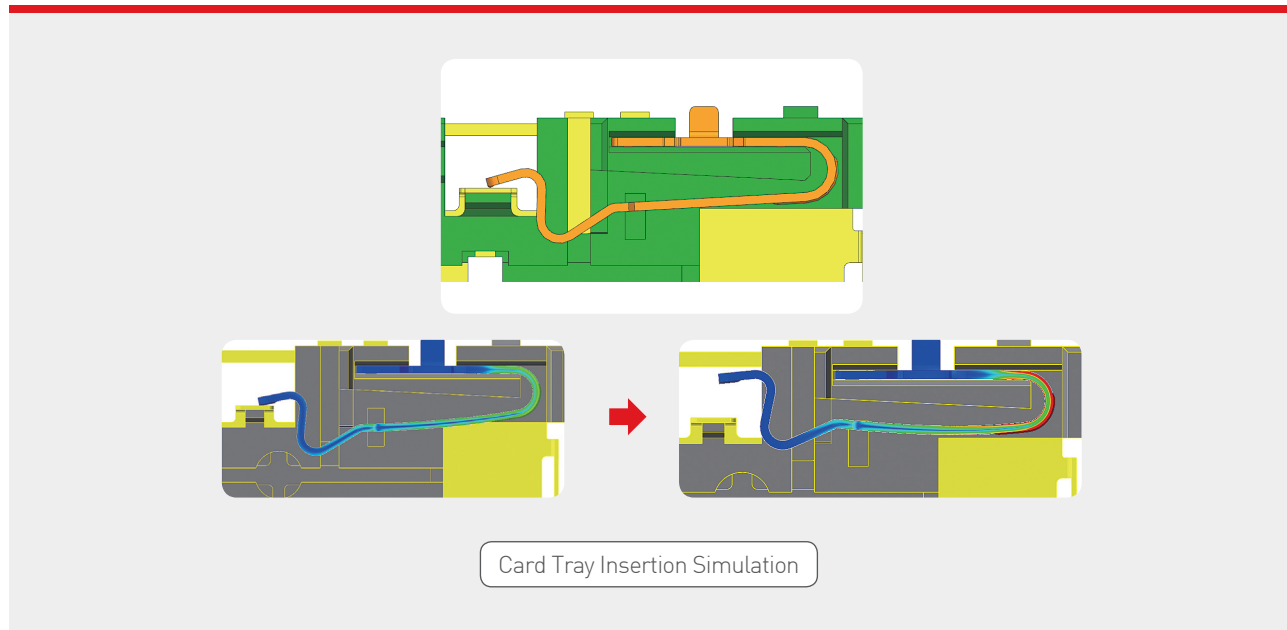
Contact Force Simulation

SIM and Memory Card Socket Connector **S06**

Mobile Connector

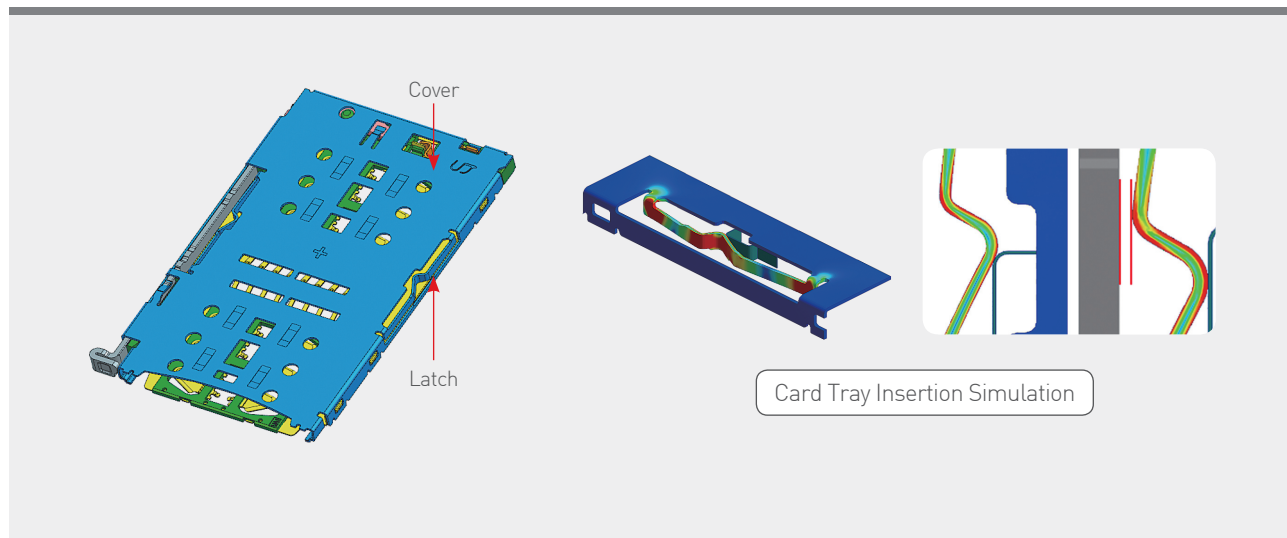
3. Switch y-axis ON-OFF structure

- ▶ Normal [CLOSE] → Tray inserted [OPEN]
- ▶ Strengthen contact stability
- ▶ Improving product quality reliability



4. Cover & Latch all in one structure

- ▶ Improving product strength
- ▶ Improving product quality reliability



SIM and Memory Card Socket Connector **S06**

Mobile Connector

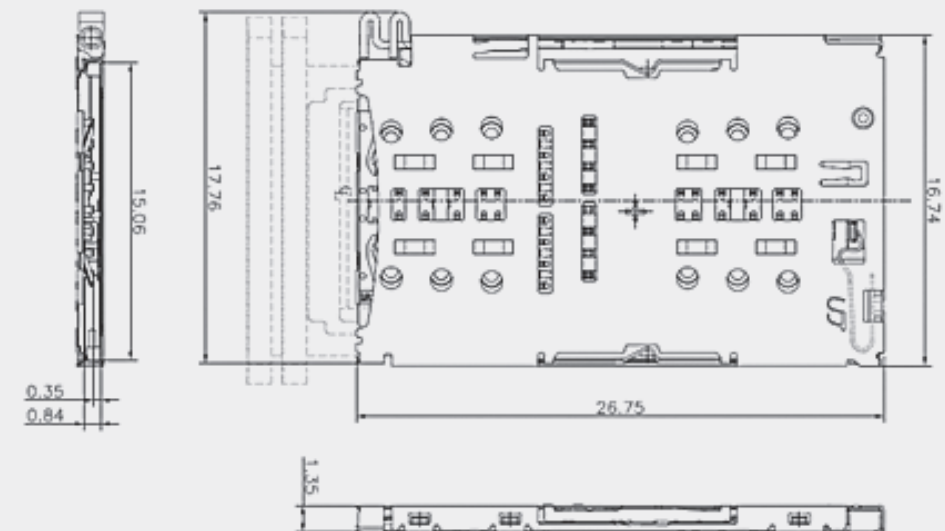
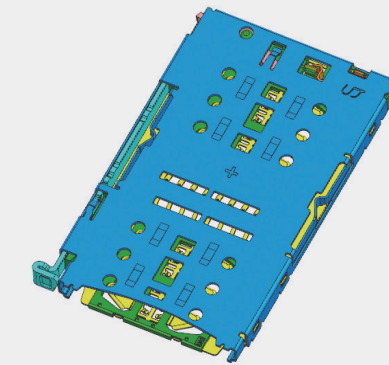
TS254-C21B-C14-A

Product Number Structure

T S 254 - C 21 B - C 14 - A
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Type of connectors : TRIPLE SOCKET	② Style : Socket
③ Contact Pitch : 2.54mm	④ Type : Shell cover
⑤ No. of position : 21P	⑥ Test of on board : Board on
⑦ Shape symbol : With Fitting	⑧ Connector Height : 1.35mm
	⑨ Option

Product Drawing

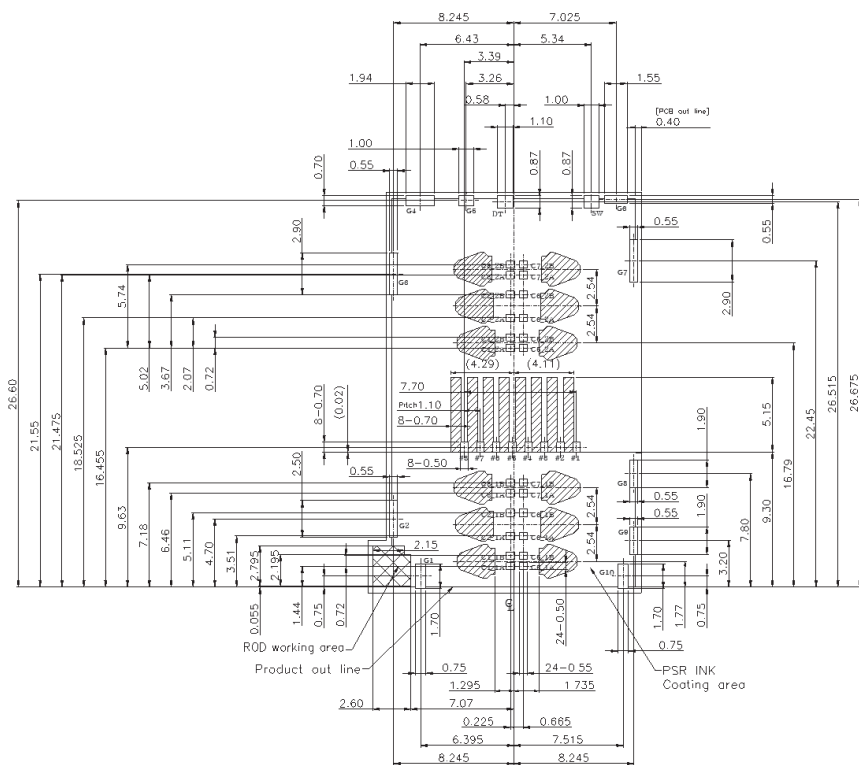


SIM and Memory Card Socket Connector **S06**

Mobile Connector

TS254-C21B-C14-A

Recommended PCB Dimensions



RECOMMENDED P.C.B LAYOUT (FRONT VIEW)
TOLERANCE : ±0.05

() No trace / No VIA (No signal / No ground)

Recommend metal mask is thickness 0.1mm with aperture ratio 150% for soldering.
(메탈마스크 권장 두께는 0.1mm, 개구율은 150%)

【micro SD CARD PIN-MAP】

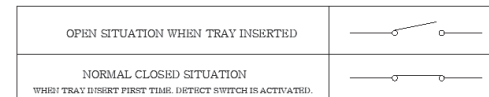
Pin No.	Description
#1	DAT2
#2	CD/DAT3
#3	CMD
#4	VDD
#6	CLK
#8	VSS
#7	DAT0
#8	DAT1

【NANO SIM CARD PIN-MAP】

Pin No.	Description	
C1-1	C1-2	VCC
C2-1	C2-2	RST
C8-1	C8-2	CLK
C5-1	C5-2	GND
C6-1	C6-2	VPP
C7-1	C7-2	I/O

G1-G10	GND or NOT CONNECT
S/W	GROUND
TRAY D/T	TRAY DETECTOR

【TIMING SEQUENCE】

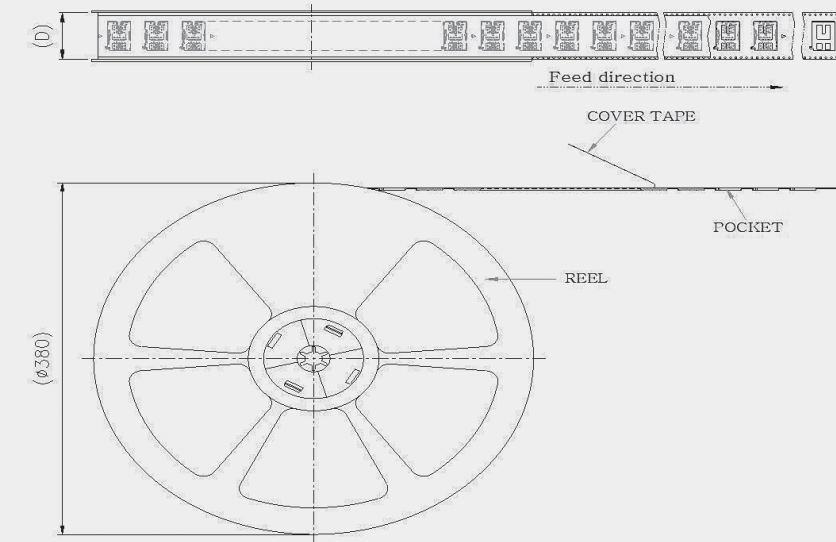


SIM and Memory Card Socket Connector **S06**

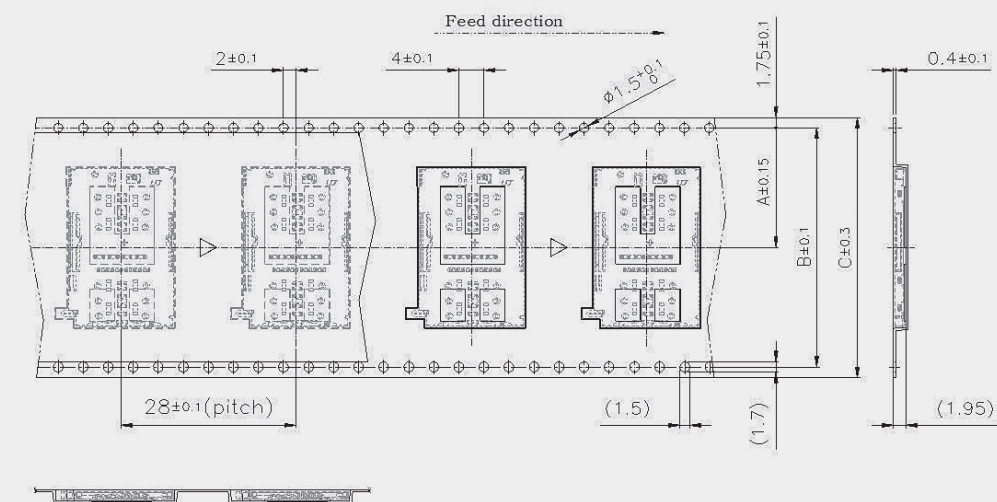
Mobile Connector

TS254-C21B-C14-A

Reel Dimensions



Embossed Carrier Tape Dimensions



【DIMENSION TABLE】

Product Name	Product Number	No. of Contets	A	B	C	D
S06	TS254-C21B-C14-A	21	20.2	40.4	44	45.4

SIM and Memory Card Socket Connector **S07**

Mobile Connector

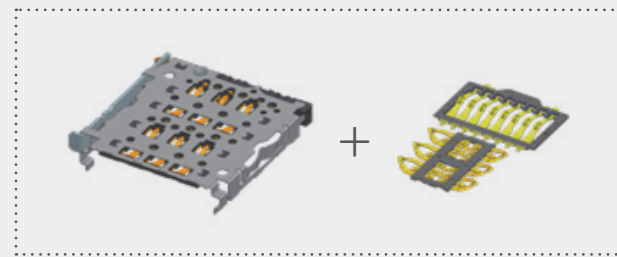
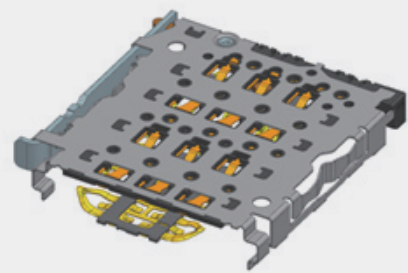
TS254-C21B-C14-A | TS254-C21B-C14-B | TS254-C21B-C14-C

Applications

- ▶ Smart Phone
- ▶ Tablet PC

Characteristics

- ▶ Combo Stacked 3in2 (microSD & nano-SIM) Socket
- ▶ Pin-Eject Tray Type
- ▶ Separation Type



- ▶ 3in2 Stack Mold Tray Socket
- ▶ SD & SIM Terminal deformation prevention structure
- ▶ TRAY reverse insertion prevention structure
- ▶ Switch ON-OFF Structure
- ▶ All-in-one Cover & Latch

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
TOP Ass'y 0.5A/Pin	100mΩ [Max.]	1,000mΩ [Min.]	AC 500V	-40°C ~ 85°C
SD/SIM Ass'y 0.3A/Pin				

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	CODE
6	2.54	15.25	2.30	16.40	TS254-C21B-C14-A
6	2.54	8.00	0.78	8.01	TS254-C21B-C14-B
8	1.10	7.62	0.79	10.10	TS254-C21B-C14-C

SIM and Memory Card Socket Connector **S07**

Mobile Connector

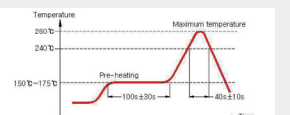
TS254-C21B-C14-A | TS254-C21B-C14-B | TS254-C21B-C14-C

Product Specification

Ratings	Rated current	0.5A Max	Operating temperature range	-40°C to +85°C 1)	Storage temperature range	- 5°C to +40°C (With packing)
	Rated voltage	Max 10V AC(RMS) or DC	Operating humidity range	10% to 80% RH 2)	Storage humidity range	65%RH

- 1) Including terminal temperature rise.
2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	100mΩ [Max.]	- Open circuit voltage: 20mV. - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	- Test voltage: 500V d.c. - Test time: 1 minute ± 5 seconds.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 500V for 1minute
4. Tray insert force	1,000gf [Max.]	Insert the tray at a rate of 25±3 mm/min. (actual card used)
5. Rod withdrawal force	- SIM1+SIM2 : 400~1200gf - SIM1+SD : 400~1300gf	- Press Rod with a pin. (Speed 25 mm/min) - Measure the force at the third time when the actual use card is mounted.
6. Durability	1) Check whether the SIM card terminal surface is split and the card terminal is short. 2) contact resistance - Max 100mΩ 3) Pin removal force (2,000 times) - SIM1+SIM2 : 400~1200gf - SIM1+SD : 400~1300gf	1) Attach and detach 500 times. 2) Attach and detach 2,000 times. 3) Reattach the 0.7T SD/SIM card tested in Sample No.2 and attach/detach an additional 3,000 times%
7. Vibration	Discontinuity : 1.0 microsec. MAX.	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz / Approx 1min. - Duration : 2h each (6h in total)
8. Shock resistance	Discontinuity : 1.0 microsec. MAX.	- Acceleration : 50G (490%) - Duration : 11ms - Number of shocks : 3 both axial directions, 3 times each, 18 times in total - Test voltage : 5V d.c. - Test current : 1mA d.c.
9. Humidity	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	- MAX. Change from Initial contact resistance 40mΩ MAX. - Insulation resistance : 100MΩ Min	- 40±3(°C) : 30 minutes → 85±2(°C) : 30 minutes, 96 cycles
11. Solder heat resistance	- No have something wrong of push functions. - No have deformation and fall off. - No have something wrong outward appearance and structure.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Top Base	LCP	Black	UL94V-0
Top Terminal	Copper Alloy	Au-Pd, Ni plated	-
Cover	Stainless Steel	Ni plated	-
Switch	Copper Alloy	Au-Pd, Ni plated	-
Eject Rod	Stainless Steel	-	-
Lever	Stainless Steel	-	-
Rivet Pin	Stainless Steel	-	-
SIM Base	LCP	Black	UL94V-0
SIM Terminal	Copper Alloy	Au-Pd, Ni plated	-
SD Base	LCP	Black	UL94V-0
SD Terminal	Copper Alloy	Au-Pd, Ni plated	-

SIM and Memory Card Socket Connector **S07**

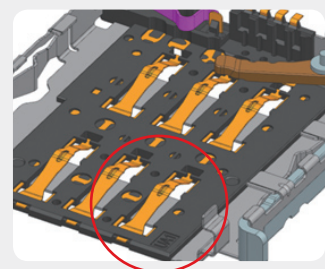
Mobile Connector

TS254-C21B-C14-A | TS254-C21B-C14-B | TS254-C21B-C14-C

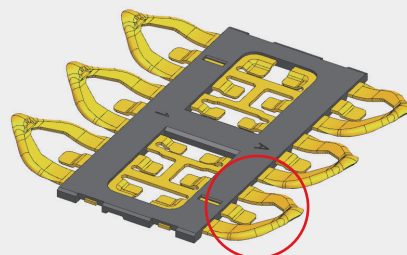
FEATURES AND ADVANTAGES

► SIM & SD Terminal deformation prevention structure

- Strengthen contact stability
- Improving product quality reliability



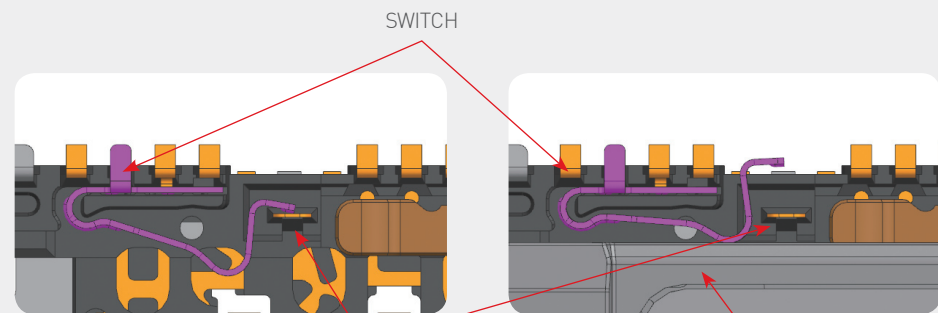
SIM CONTACT



micro SD CONTACT

► Switch y-axis ON-OFF structure

- Normal [CLOSE] --> Tray inserted [OPEN]
- Strengthen contact stability
- Improving product quality reliability



DETECT (GND)

TRAY INSERTED

SIM and Memory Card Socket Connector **S07**

Mobile Connector

TS254-C21B-C14-A | TS254-C21B-C14-B | TS254-C21B-C14-C

Product Number Structure

T S 254 - C 20 B - C 23 - *
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Type of connectors : TRIPLE SOCKET

② Style : Socket

③ Contact Pitch : 2.54mm

④ Type : Shell cover

⑤ No. of position : 20P

⑥ Test of on board : Board on

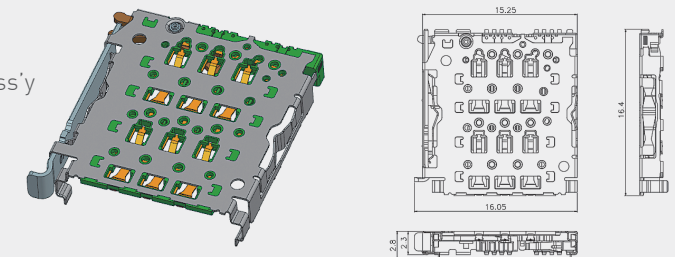
⑧ Connector Height : 2.30mm

⑦ Shape symbol : With Fitting

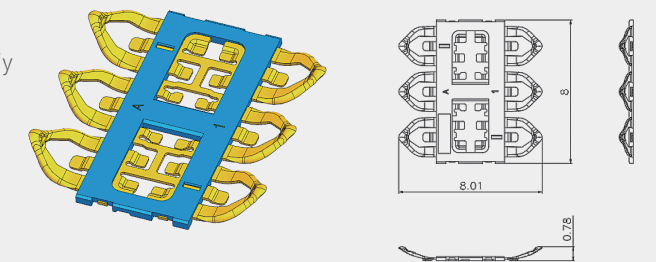
⑨ Option - A : TOP Ass'y
 - B : SIM Ass'y
 - C : SD Ass'y

Product Drawing

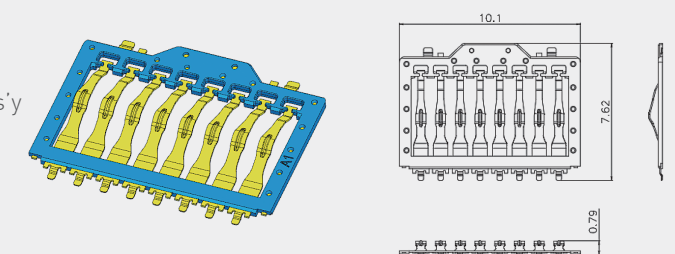
► TOP Ass'y



► SIM Ass'y



► SD Ass'y

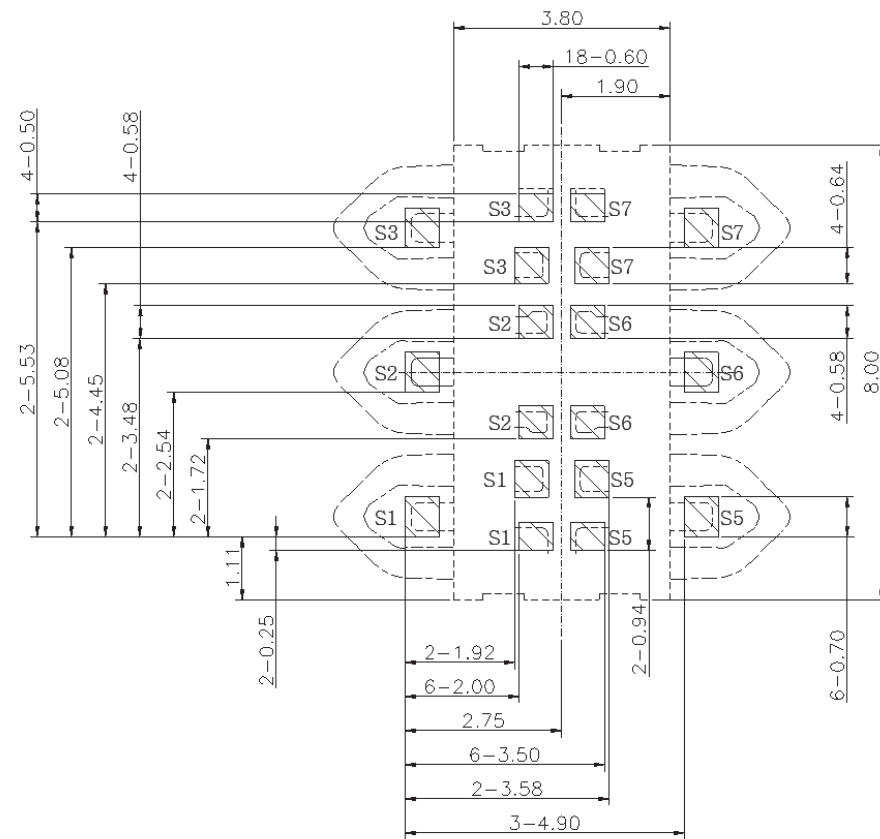


SIM and Memory Card Socket Connector **S07**

Mobile Connector

TS254-C21B-C14-A | TS254-C21B-C14-B | TS254-C21B-C14-C

Recommended PCB Dimensions



TOP
PCB Layout TOLERANCE : ± 0.05
Recommend metal mask is thickness 0.1mm(메탈마스크 권장 두께는 0.1mm)
STEEL MESH RATION 1:1

【NANO SIM CARD PIN MAP】

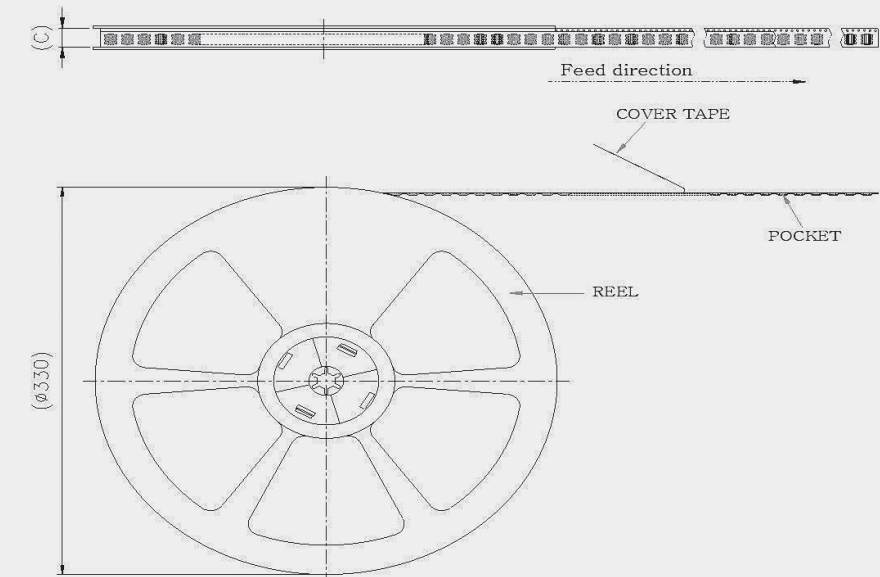
NANO Card	Pin No.	Description
C1	S1	VCC
C2	S2	RST
C3	S3	CLK
C5	S5	GND
C6	S6	VPP
C7	S7	I/O

SIM and Memory Card Socket Connector **S07**

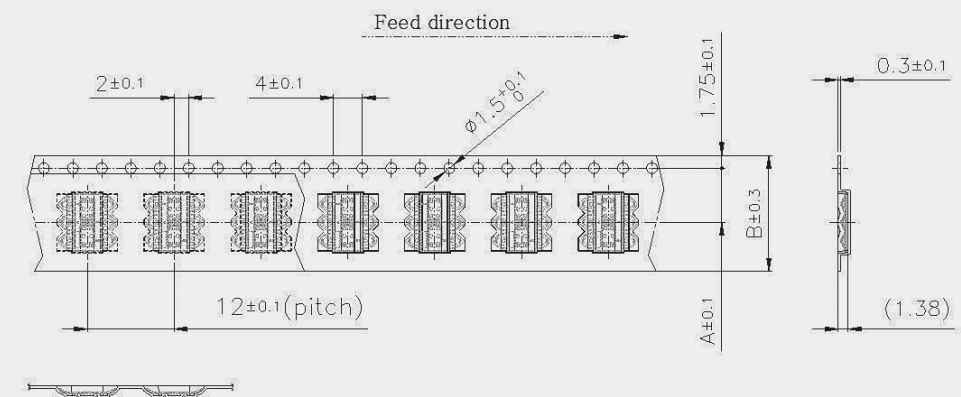
Mobile Connector

TS254-C21B-C14-A | TS254-C21B-C14-B | TS254-C21B-C14-C

Reel Dimensions



Embossed Carrier Tape Dimensions



【DIMENSION TABLE】

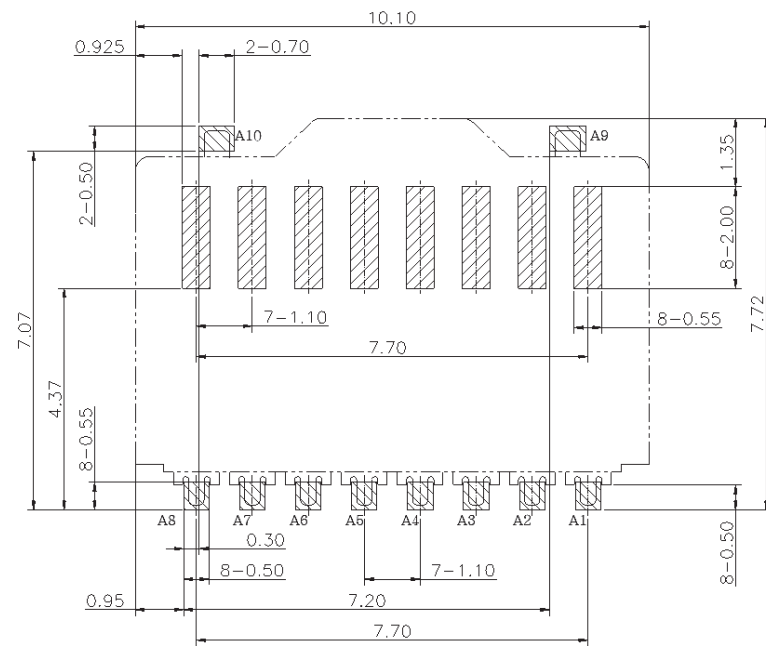
Product Name	Product Number	No. of Contacts	A	B	C
S07 (SIM)	TS254-I20B-C23-B	20	7.5	16	17.4

SIM and Memory Card Socket Connector **S07**

Mobile Connector

TS254-C21B-C14-A | TS254-C21B-C14-B | TS254-C21B-C14-C

Recommended PCB Dimensions



TOP
PCB Layout TOLERANCE : ± 0.05
Recommend metal mask is thickness 0.1mm(메탈 마스크 권장 두께는 0.1mm)
STEEL MESH RATION 1:1

1. Touch area of contact tips,
No electrical function and only for mechanical function.
2. No first PCB-Layer circuit in the area

【micro SD CARD PIN-MAP】

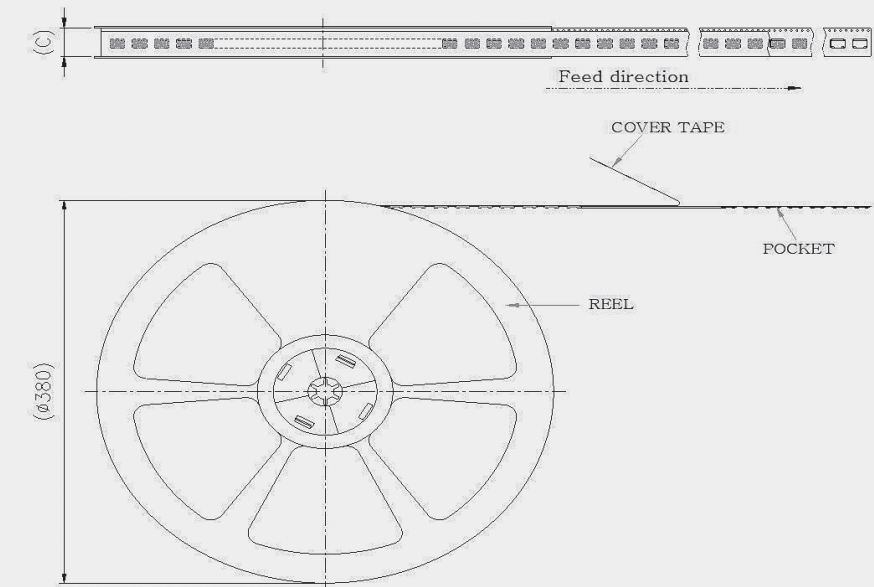
SD Card	Pin No.	Description
P1	A1	DAT2
P2	A2	CD/DAT3
P3	A3	CMD
P4	A4	VDD
P5	A5	CLK
P6	A6	VSS
P7	A7	DAT0
P8	A8	DAT1
-	A9/A10	GROUND

SIM and Memory Card Socket Connector **S07**

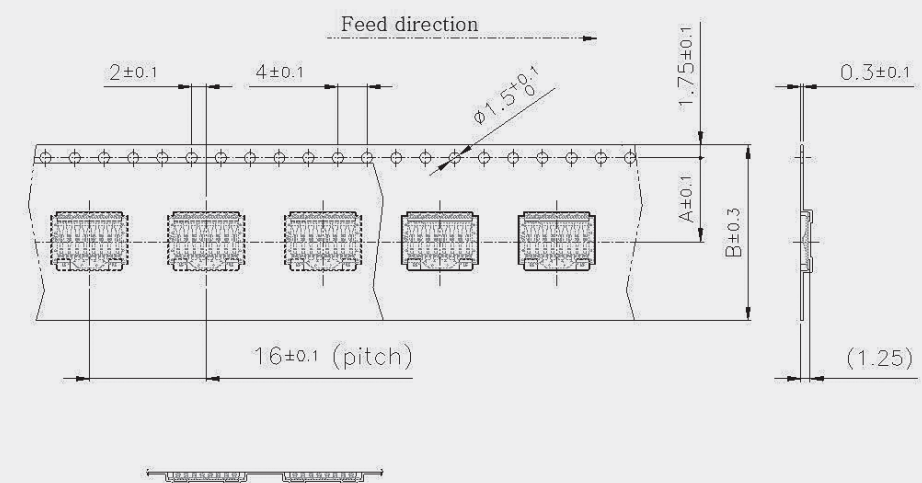
Mobile Connector

TS254-C21B-C14-A | TS254-C21B-C14-B | TS254-C21B-C14-C

Reel Dimensions

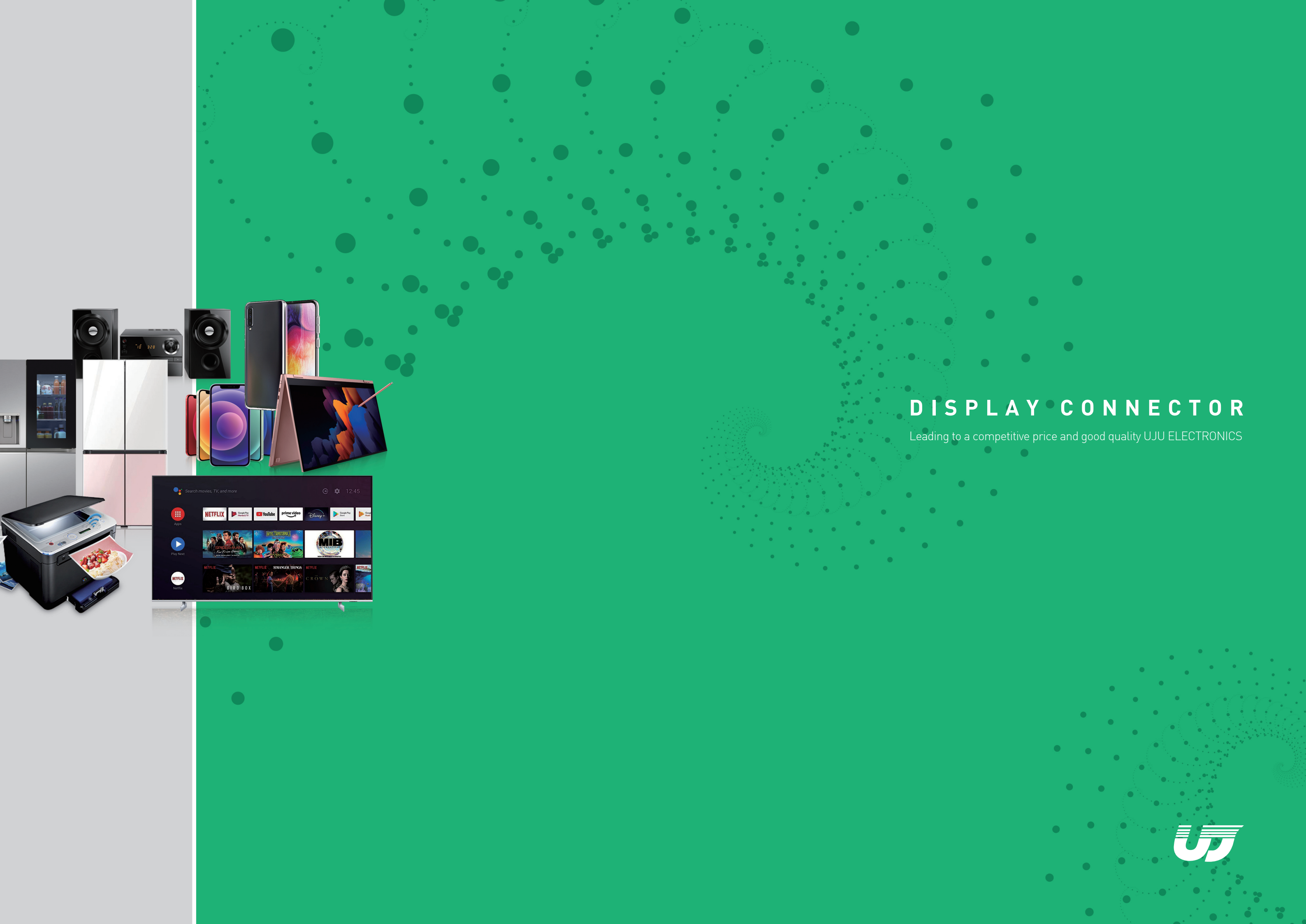


Embossed Carrier Tape Dimensions



【DIMENSION TABLE】

Product Name	Product Number	No. of Contcts	A	B	C
S07 (SD)	TS254-I20B-C23-C	20	11.5	24	25.4



DISPLAY CONNECTOR

Leading to a competitive price and good quality UJU ELECTRONICS



Application on DIASPLAY

Products & Technologies - Connector Division

Application on DIASPLAY

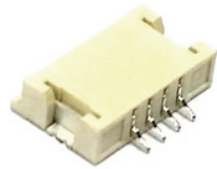
Products & Technologies - Connector Division

Back Light(FL/LED) Power (H:2.0mm~6.5mm)

LED Power



Right Angle



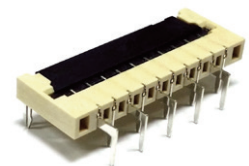
BLU Plug



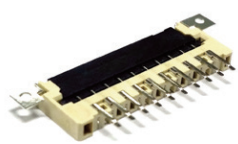
BLU Receptacle



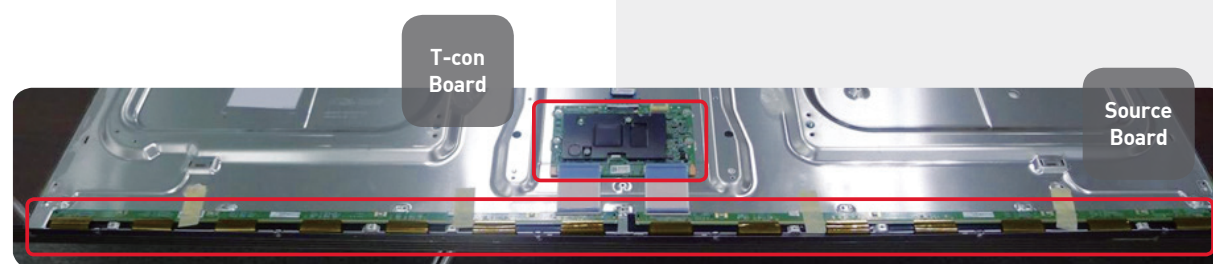
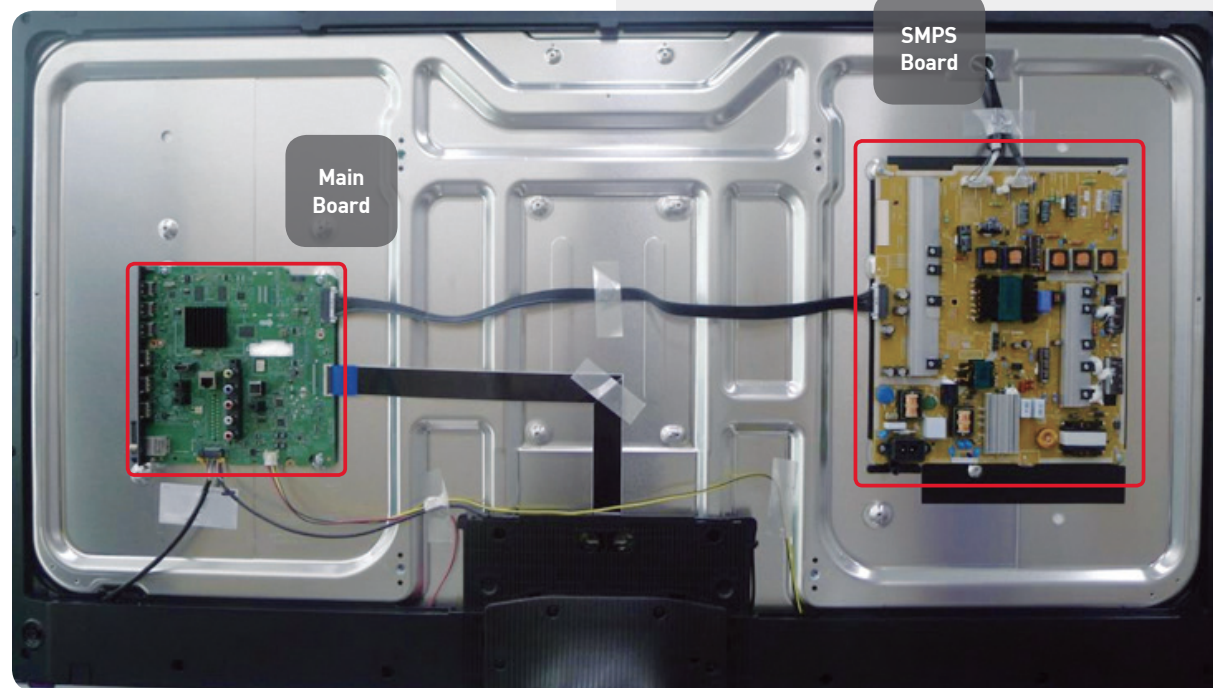
Locking Dip



Locking Offset

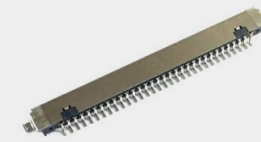


Lateral Type

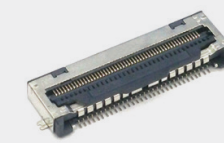


LVDS Connector (H:1.0mm~4.0mm)

Header



Front Flip

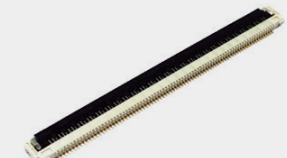


Housing Type



FPC/FFC Connector (H : 0.9mm~2.2mm)

Front Flip






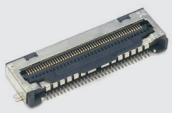


Back Flip



LVDS - FFC Connector

LVDS Connector

“**” : Available pins

Item	Pin	Spec				Code
		Height	Pitch	Type		
	LCD 0.5 Pitch Header	30, 40	10	0.5	LVDS, On Board	IS050-L**B-C10
	LCD 1.0 Pitch 1.55H Header	30	1.55	1.0	LVDS, Off-set / Reverse	IS100-L300-C15 IS100-L30R-C15
	LCD 1.0 Pitch 2.25H Header	30	2.25	1.0	LVDS, On-Board / Off-set / Reverse	IS100-L30B-C23 IS100-L300-C23 IS100-L30R-C23
	FPC 0.5 Pitch 82P 3.5H Header	82	3.5	0.5	Non ZIF Type	PF050-C82B-C35
	LCD 0.5 Pitch 3.85H Header	41, 51	3.85	0.5	LVDS, On Board	IS050-C**B-C39-C
	FPC 0.5 Pitch 4.0H Header Type	82	4.0	0.5	Top / Bottom Contact Front Type	PF050-L82B-C40

LED POWER Connector

Back Light (FL / LED) Power

“**” : Available pins

Item	Pin	Spec				Code
		Height	Pitch	Type		
	FFC 1.0 Pitch 2.0H PLUG	6	2.0	1.0	LED Power	IS100-L06B-C20 (RECEPTACLE) HS100-L06N-N20 (PLUG)
	FFC 1.0 Pitch 2.0H Right Angle	4	2.05	1.0	Non ZIF Type	FN100-Z04B-C20
	FFC 2.0 Pitch 2.5H Locking Dip	10	2.5	1.0	DIP	FN200-L10T-C25
	FFC 2.0 Pitch 2.5H Locking offset	10	2.5	2.0	Offset	FF200-L100-C25
	LED FFC 1.0 Pitch 8Pin 4.6H	8	4.6	1.0	BLU On Board / DIP White / Balck Color	IS100-L08T-C46-* (RECEPTACLE) HS100-L08N-N62 (PLUG) HS100-L08N-N62-A (PLUG)
	FFC 1.0 Pitch 8P NON-ZIF	8, 10, 15	5.5 2.2	1.0	Non ZIF Vertical Lateral Type	FN100-Z**B-C55 FN100-Z**B-C22
	FFC 1.25 Pitch 6.5H LED	12	6.5	1.25	BLU On Board / DIP	IS125-L12B-C65 IS100-L12T-C65 (RECEPTACLE) HS125-L12N-N65 (PLUG)
	FFC 1.25 Pitch 2.2H NON-ZIF Lateral type	12	2.2	1.25	Non ZIF, Lateral Type	FN125-Z12B-C22

LVDS Connector VENUS

Display Connector

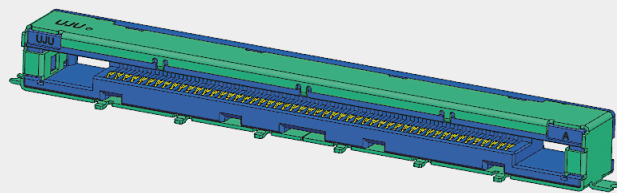
IS050-C**B-C39-C

Applications

- ▶ LCD/LED TV
- ▶ Displays such as automobile

Characteristics

- ▶ Strengthen contact stability
- ▶ Improving product quality reliability



- ▶ Low Voltage Differential Signaling(LVDS) connector
- ▶ Terminal deformation prevention structure
- ▶ Reverse insertion prevention structure
- ▶ Damage prevention structure by a cover

Specifications

Current Rating	Contact Resistance	Insulation Resistance	Dielectric Strength	Temperature Range
AWG #30, #32, #36 0.8A/Pin	80mΩ [Max.]	100MΩ [Min.]	AC 500V	-25°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	Product No.
41	0.5	3.75	3.85	32.85	IS050-C**B-C39-C
51				37.85	

LVDS Connector VENUS

Display Connector

IS050-C**B-C39-C

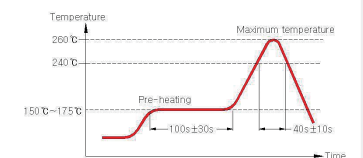
Product Specification

Ratings	Rated current	AWG #30 , #32 , #36 0.8A/Pin	Operating temperature range	-25°C to +85°C 1)	Storage temperature range	15°C to 35°C (With packing)
	Rated voltage	AC , DC 200V	Operating humidity range	25% to 95% RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	80mΩ [Max.]	- Test Current : 10μA - Open voltage : 20mV max.
2. Insulation resistance	100MΩ Min.	Test voltage : DC 100V 1min±5sec (Based upon MIL-STD-202 Method302 condition B)
3. Withstanding voltage	No flashover or dielectric breakdown	- Test voltage : AC 500V - Electrification time : 1 min/5 sec (Based upon MIL-STD-202 Method 301)
4. Insertion Force	10.2kgf [Max.]	Insert the wafer at a rate of 25±3 mm/min.
5. Withdrawal Force	After 10 test , 0.52kgf [Min.]	Withdraw the wafer at a rate of 25±3 mm/min.
6. Durability	Contact resistance : 80mΩ Max	30 cycle of total insertion and withdrawal operation.
7. Vibration	Contact resistance : 80mΩ Max	- Vibration frequency range : 10-55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz / Approx 1min. - Duration : 2h each (6h in total) - Acceleration : 50G (490%) - Duration : 11ms
8. Shock resistance	Discontinuity : 1.0 microsec. MAX.	- Number of shocks : 3 both axial directions, 3 times each, 18 times in total - Test current : 100mA - Detection level of text current disconnection : 1μs
9. Humidity	- Contact resistance : 80mΩ Max - Insulation resistance : 50MΩ Min	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
10. Temperature cycle	- Contact resistance : 80mΩ Max - Insulation resistance : 50MΩ Min	- 40±3(°C) : 30 minutes → +85±2(°C) : 30 minutes, 96 cycles

11. Solder heat resistance
Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.Reflow condition.
(Refer to Reflow)

Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Terminal	Phosphor Bronze	Au , Ni plated	-
Cover	Stainless Steel	Sn , Ni plated	-

LVDS Socket Connector User 30P

Interface Connector

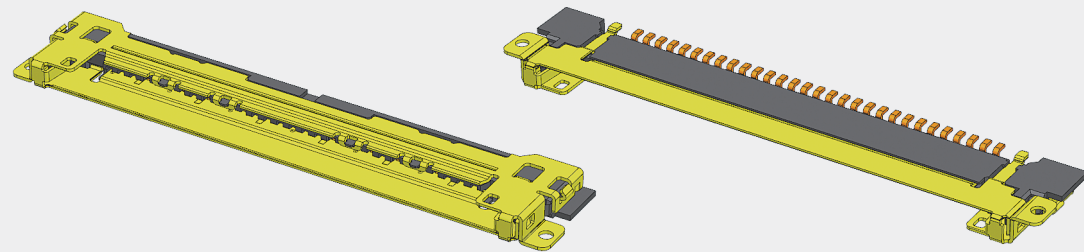
IS050-L30B-C10

Applications

- ▶ Note Book
- ▶ Display Panels

Characteristics

- ▶ LVDS Socket connector
- ▶ High data rate Transfer



- ▶ 0.5mm pitch, 1.0mm slim stacking design for saving space
- ▶ Horizontal type micro-coaxial connector
- ▶ Micro-Coaxial Cable (AWG) : #32, #36, #38, #40, #42, #44
- ▶ High data rate transfer
- ▶ Anti-reverse mating design

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
See below the table	Contact 60mΩ [Max.] Shell 50mΩ [Max.]	500V AC(RMS)	-35°C ~ 85°C

Applicable Wire (AWG)	#32	#34	#36	#40	#42	#44
Current Rating (per a contact)	1.0A AC/DC	1.0A AC/DC	0.8A AC/DC	0.3A AC/DC	0.24A AC/DC	0.1A AC/DC

Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
30	0.50	3.95	1.00	21.25	IS050-L30B-C10

LVDS Socket Connector User 30P

Interface Connector

IS050-L30B-C10

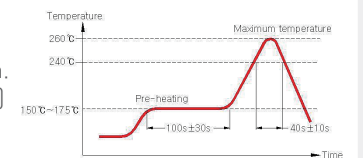
Product Specification

Ratings	Rated current	See the table	Operating temperature range	-35°C to +85°C 1)	Storage temperature range	15°C to 35°C (With packing)
	Rated voltage	100V AC(RMS)/DC	Operating humidity range	70%RH Max. 2)	Storage humidity range	65%RH Max. 2)

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	- Contact : 60mΩ [Max.] - Shell : 50mΩ [Max.]	- Open circuit voltage: 20mV Max.(AC) - Test current: 10mA.
2. Insulation resistance	1,000MΩ [Min.]	500V DC
3. Withstanding voltage	No flashover or dielectric breakdown	500V AC(RMS) for 1minute
4. Insertion Force	1.24kgf [Max.]	Measured force to insert wafer assembly into the housing assembly which has same circuits. (Speed 25mm/Min)
5. Withdrawal Force	0.31kgf [Min]	Measured forces to withdraw wafer assembly from the housing assembly which has same circuits. (Speed 25mm/Min)
6. Durability	Contact resistance - Contact : 100mΩ [Max.] - Shell : 90mΩ [Max.]	Measured after 30 cycle total insertion and withdrawal operation.
7. Vibration	1) Discontinuity : 1.0 microsec. [Max.] 2) Contact resistance - Contact : 100mΩ [Max.] - Shell : 90mΩ [Max.]	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
8. Humidity	1) Contact resistance - Contact : 100mΩ [Max.] - Shell : 90mΩ [Max.] 2) Insulation resistance : 500MΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Contact Terminal	Phosphor Bronze	Au , Ni plated	-
Shell Cover	Phosphor Bronze	Au , Ni plated	-

LVDS Socket Connector User 30P

Interface Connector

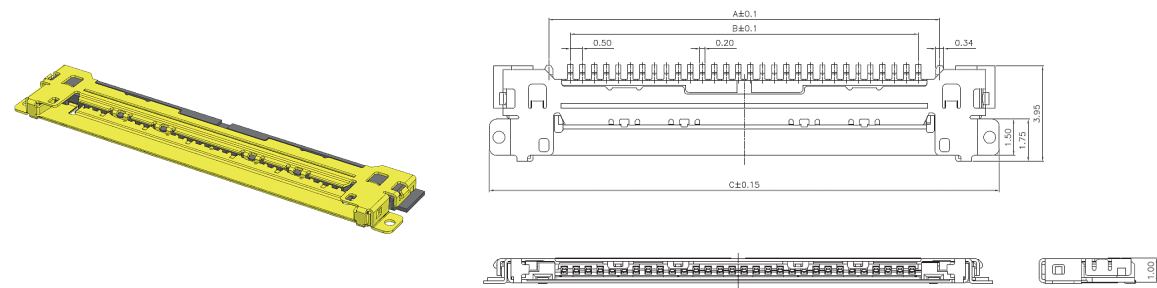
IS050-L30B-C10

Product Number Structure

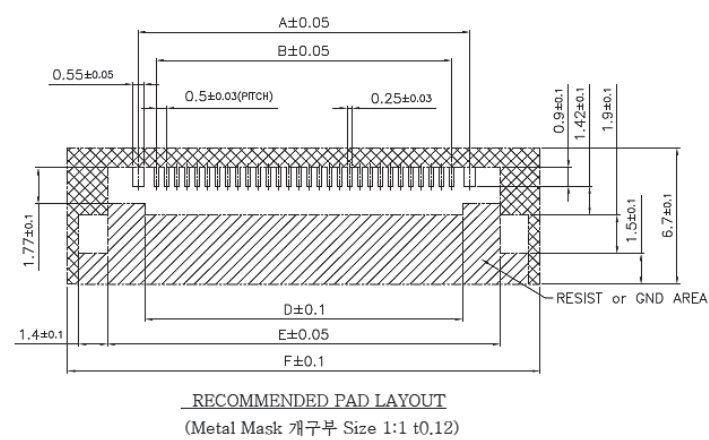
I S 050 - L 30 B - C 10
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : Interface(I/O)
- ② Style : Slide
- ③ Contact Pitch : 0.50mm
- ④ Type : Locking Type (Shell Cover)
- ⑤ No. of position : 30P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting
- ⑧ Connector Height : 1.0mm

Product Drawing



Recommended PCB , Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E	F
IS050-L30B-C10	30	16.30	14.50	21.25	15.60	19.30	23.20

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

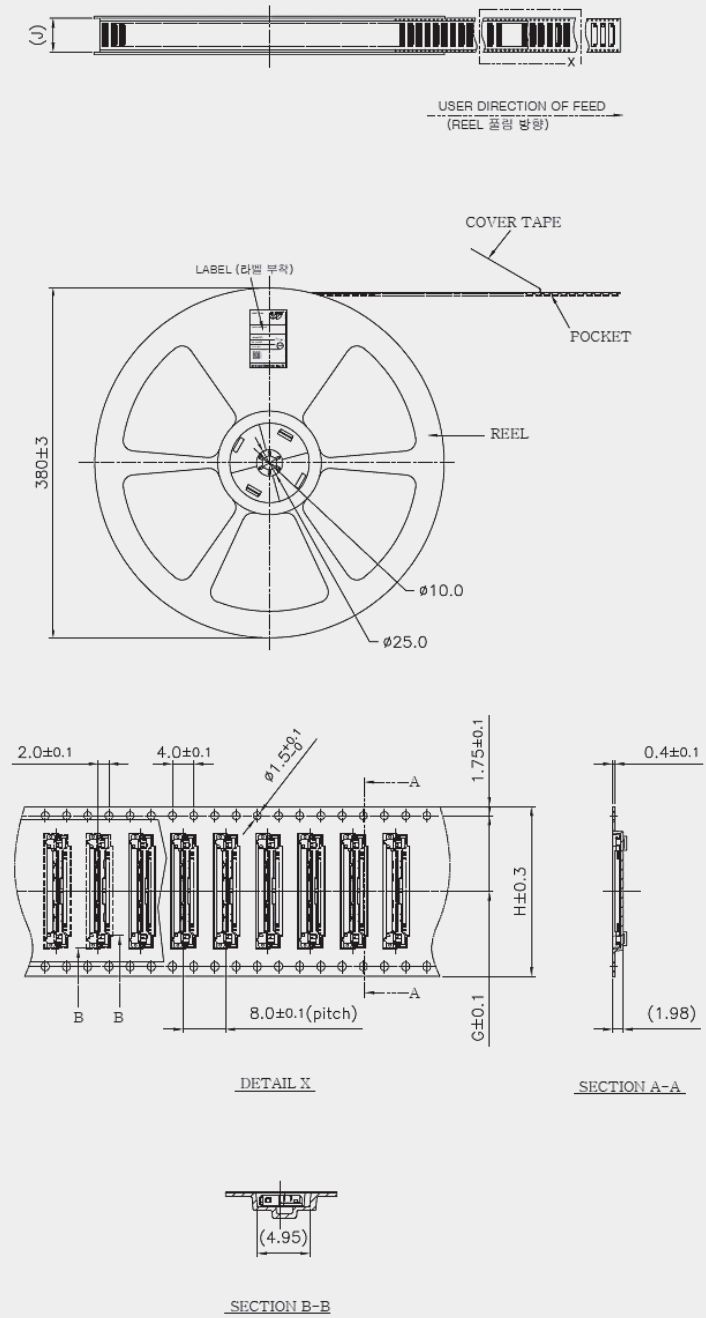
Note 2 : This connector has no polarity.

LVDS Socket Connector User 30P

Interface Connector

IS050-L30B-C10

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	G	H	J
IS050-L30B-C10	30	14.2	32.0	32.4

Note 1 : Please place orders in full reel quantities. (1Reel = 5,000ea)

Note 2 : This connector has no polarity.

LVDS Socket Connector **Power up offset**

Interface Connector

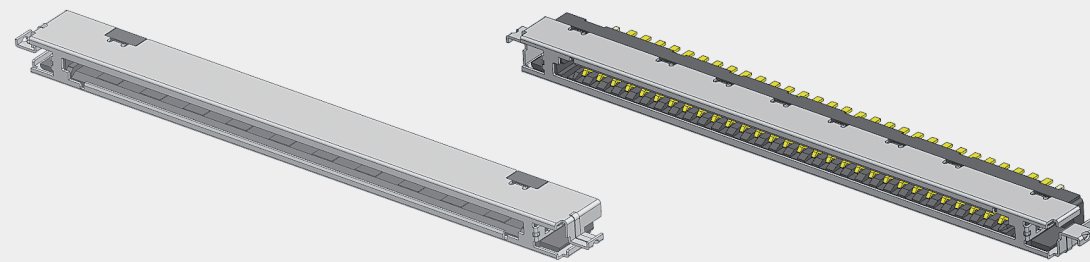
IS100-L300-C23

Applications

- ▶ Display Panels

Characteristics

- ▶ LVDS Socket connector
- ▶ High data rate Transfer



- ▶ 0.5mm pitch, 2.25mm height, Horizontal offset type connector
- ▶ Widely used in a variety of markets including PC, TV etc.
- ▶ Ease mating, 30 cycle durability
- ▶ High data rate transfer
- ▶ Anti-reverse mating design

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
1.0A/Pin (Applicable Wire : AWG #30)	40mΩ [Max.]	500V AC(RMS)	-35°C ~ 85°C

Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
30	1.0	4.90	2.25	40.0	IS100-L300-C23

LVDS Socket Connector **Power up offset**

Interface Connector

IS100-L300-C23

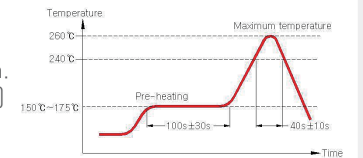
Product Specification

Ratings	Rated current	1.0A/Pin	Operating temperature range	-35°C to +85°C 1)	Storage temperature range	15°C to 35°C (With packing)
	Rated voltage	200V AC(RMS)/DC	Operating humidity range	70%RH Max. 2)	Storage humidity range	65%RH Max. 2)

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	40mΩ [Max.]	- Open circuit voltage: 20mV Max.[AC] - Test current: 10mA.
2. Insulation resistance	100MΩ [Min.]	100V DC
3. Withstanding voltage	No flashover or dielectric breakdown	500V AC(RMS) for 1minute
4. Insertion Force	6.0kgf [Max.]	Measured force to insert wafer assembly into the housing assembly which has same circuits. (Speed 25mm/Min)
5. Withdrawal Force	0.75kgf [Min.]	Measured forces to withdraw wafer assembly from the housing assembly which has same circuits. (Speed 25mm/Min)
6. Durability	Contact resistance - 80mΩ [Max.]	Measured after 30 cycle total insertion and withdrawal operation.
7. Vibration	1) Contact resistance - 80mΩ [Max.] 2) No damage, loose part no crack	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
8. Humidity	1) Contact resistance - 80mΩ [Max.] 2) Insulation resistance : 50MΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Contact Terminal	Phosphor Bronze	Au , Ni plated	-
Guide Terminal	Phosphor Bronze	Sn, Ni plated	-
Cover	Stainless Steel	Pre-plating Sn	-

LVDS Socket Connector **Power up offset**

Interface Connector

IS100-L300-C23

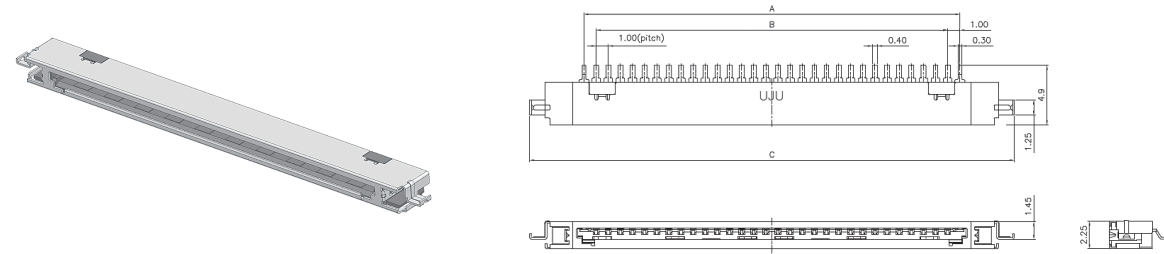
Product Number Structure

I S 100 - L 300 - C 23

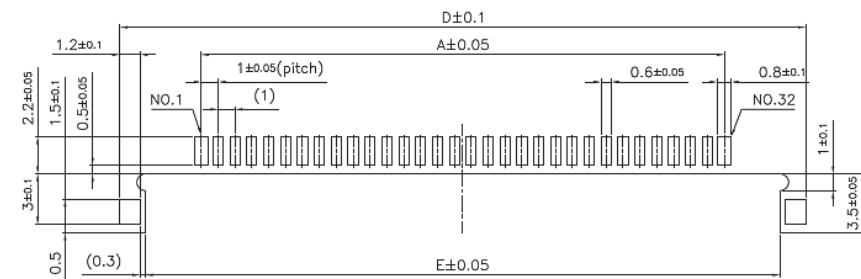
① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : Interface(I/O)
- ② Style : Slide
- ③ Contact Pitch : 1.00mm
- ④ Type : Locking Type (Cover)
- ⑤ No. of position : 30P
- ⑥ Test of on board : Offset
- ⑦ Shape symbol : With Fitting
- ⑧ Connector Height : 2.25mm

Product Drawing



Recommended PCB , Metal Mask Layout



RECOMMENDED PAD LAYOUT
(Metal Mask 개구부 Size 1:1 to 0.10)

Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
IS100-L300-C23	30	31.00	29.00	40.00	40.65	37.65

Note 1 : Please place orders in full reel quantities. (1Reel = 2,000ea)

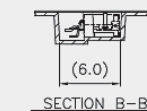
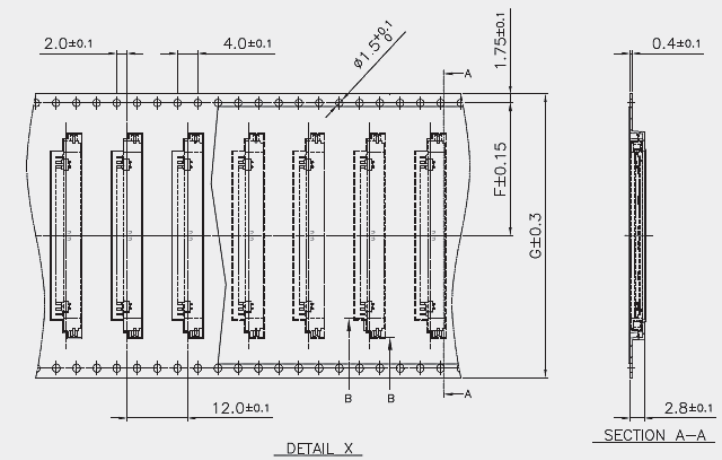
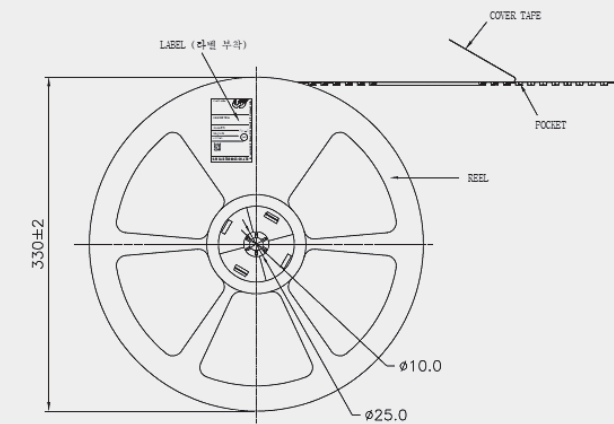
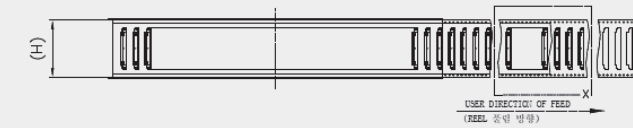
Note 2 : This connector has no polarity.

LVDS Socket Connector **Power up offset**

Interface Connector

IS100-L300-C23

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	F	G	H
IS050-L300-C10	30	26.2	56.0	57.4

Note 1 : Please place orders in full reel quantities. (1Reel = 2,000ea)

Note 2 : This connector has no polarity.

LVDS Socket Connector **Power up on**

Interface Connector

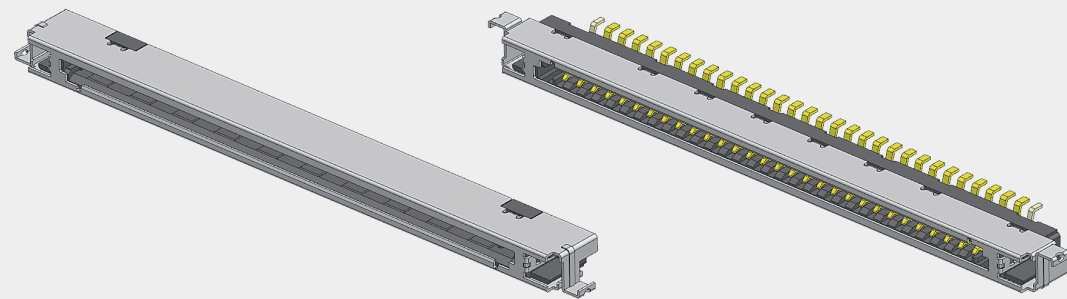
IS100-L30B-C23

Applications

- ▶ Display Panels

Characteristics

- ▶ LVDS Socket connector
- ▶ High data rate Transfer



- ▶ 0.5mm pitch, 2.25mm height, Horizontal on type connector
- ▶ Widely used in a variety of markets including PC, TV etc.
- ▶ Ease mating, 30 cycle durability
- ▶ High data rate transfer
- ▶ Anti-reverse mating design

Specifications

Rated Current	Contact Resistance	Withstanding voltage	Temperature Range
1.0A/Pin (Applicable Wire : AWG #30)	40mΩ [Max.]	500V AC(RMS)	-35°C ~ 85°C

Size & Product No.

Pin	Pitch	Width	Height	Length	Product No.
30	1.0	4.90	2.25	40.0	IS100-L30B-C23

LVDS Socket Connector **Power up on**

Interface Connector

IS100-L30B-C23

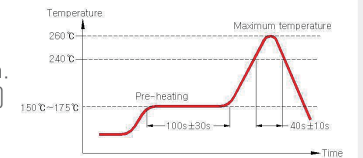
Product Specification

Ratings	Rated current	1.0A/Pin	Operating temperature range	-35°C to +85°C 1)	Storage temperature range	15°C to 35°C (With packing)
	Rated voltage	200V AC(RMS)/DC	Operating humidity range	70%RH Max. 2)	Storage humidity range	65%RH Max. 2)

1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Items	Specifications	Conditions
1. Contact resistance	40mΩ [Max.]	- Open circuit voltage: 20mV Max.[AC] - Test current: 10mA.
2. Insulation resistance	100MΩ [Min.]	100V DC
3. Withstanding voltage	No flashover or dielectric breakdown	500V AC(RMS) for 1minute
4. Insertion Force	6.0kgf [Max.]	Measured force to insert wafer assembly into the housing assembly which has same circuits. (Speed 25mm/Min)
5. Withdrawal Force	0.75kgf [Min.]	Measured forces to withdraw wafer assembly from the housing assembly which has same circuits. (Speed 25mm/Min)
6. Durability	Contact resistance - 80mΩ [Max.]	Measured after 30 cycle total insertion and withdrawal operation.
7. Vibration	1) Contact resistance - 80mΩ [Max.] 2) No damage, loose part no crack	- Vibration frequency range : 10~55Hz - Total amplitude : 1.5mm - Sweep ration : 10-55-10Hz/Min - Duration : 2h each (6h in total)
8. Humidity	1) Contact resistance - 80mΩ [Max.] 2) Insulation resistance : 50MΩ [Min.]	- Temperature : 40°C±2°C - Relative humidity : 90% RH to 95% RH - Duration : 96hr
9. Solder heat resistance	No loose contacts no deformation.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Black	UL94V-0
Contact Terminal	Phosphor Bronze	Au , Ni plated	-
Guide Terminal	Phosphor Bronze	Sn, Ni plated	-
Cover	Stainless Steel	Pre-plating Sn	-

LVDS Socket Connector **Power up on**

Interface Connector

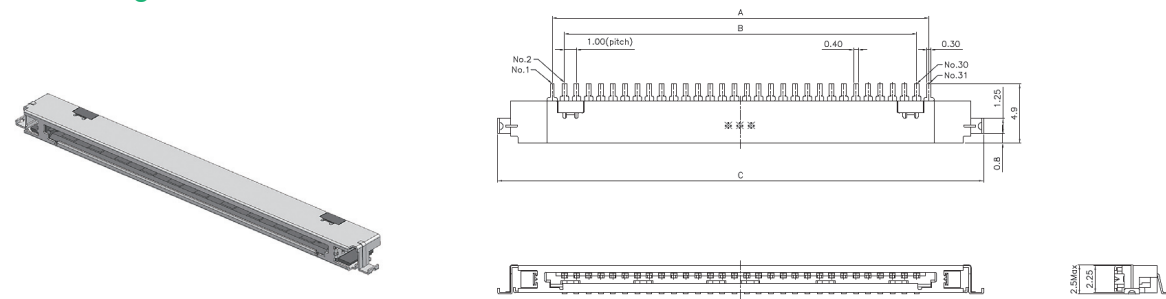
IS100-L30B-C23

Product Number Structure

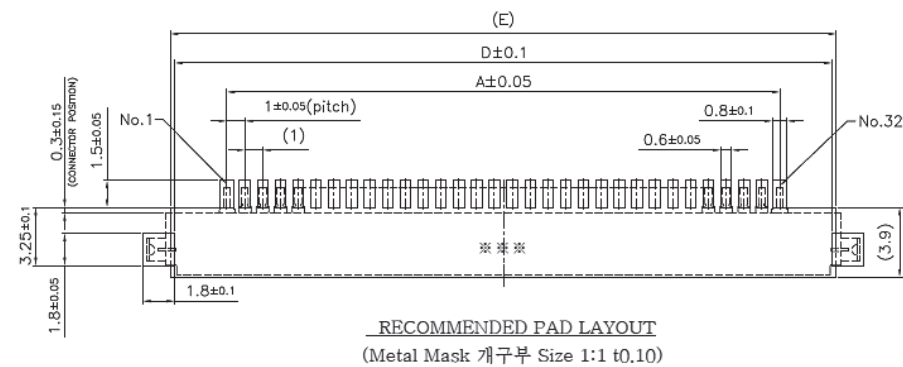
I S 100 - L 30 B - C 23
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : Interface(I/O)
- ② Style : Slide
- ③ Contact Pitch : 1.00mm
- ④ Type (타입) : Locking Type (Cover)
- ⑤ No. of position : 30P
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting
- ⑧ Connector Height : 2.25mm

Product Drawing



Recommended PCB, Metal Mask Layout



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
IS100-L30B-C23	30	31.00	29.00	40.00	36.85	40.35

Note 1 : Please place orders in full reel quantities. (1Reel = 2,000ea)

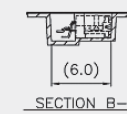
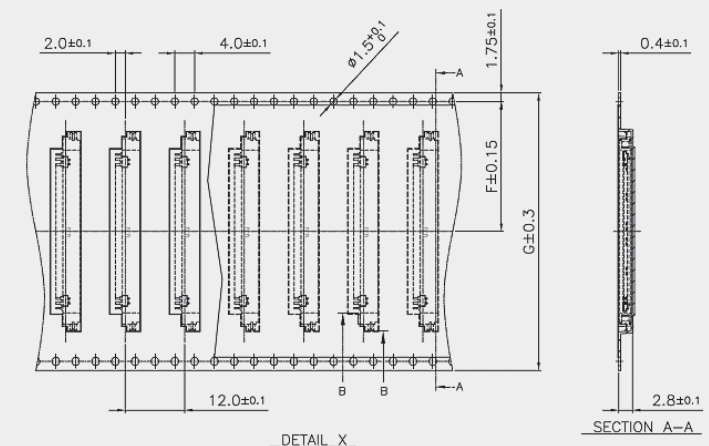
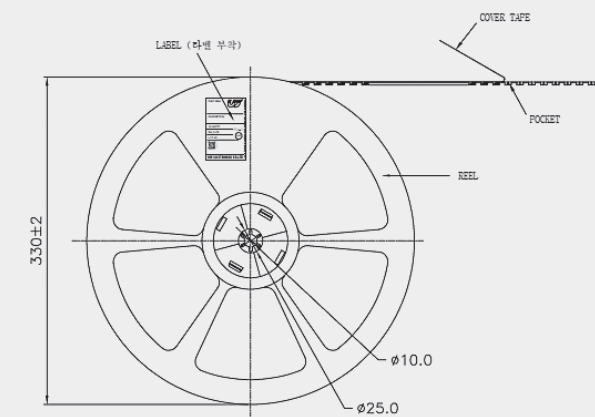
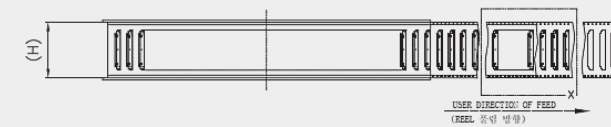
Note 2 : This connector has no polarity.

LVDS Socket Connector **Power up on**

Interface Connector

IS100-L30B-C23

Embossed Tape Dimensions



Unit : mm

Product No.	No. of Contacts	F	G	H
IS050-L30B-C10	30	26.2	56.0	57.4

Note 1 : Please place orders in full reel quantities. (1Reel = 2,000ea)

Note 2 : This connector has no polarity.

FPC/FFC Connector **FK**

Mobile Connector

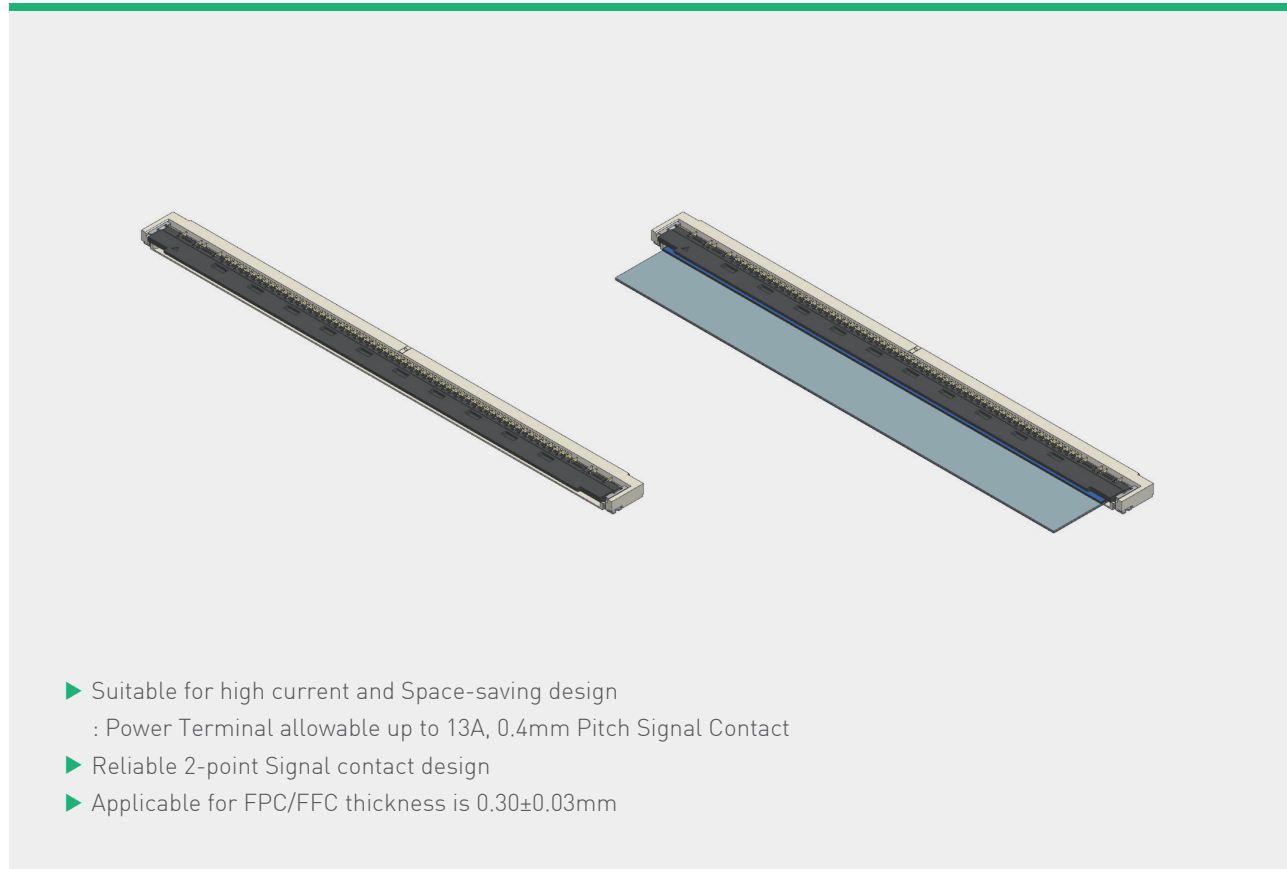
PF040-0110B-C15

Applications

- ▶ LCD/LED TV
- ▶ Displays such as automobile infotainment

Characteristics

- ▶ High current & Space-saving design
- ▶ Lock-type FPC/FFC Cable available
- ▶ Front-flip Mechanism
- ▶ Enhanced contact reliability



- ▶ Suitable for high current and Space-saving design : Power Terminal allowable up to 13A, 0.4mm Pitch Signal Contact
- ▶ Reliable 2-point Signal contact design
- ▶ Applicable for FPC/FFC thickness is 0.30±0.03mm

Specifications

Current Rating	Contact Resistance	Dielectric Strength	Temperature Range
Signal 0.4A [Max.] Power 13A [Max.]	100mΩ (Max.)	AC 120V	-35°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	CODE
110 (Signal) / 4 (Power)	0.4	5.5	1.5	59.62	PF040-0110B-C15

FPC/FFC Connector **FK**

Mobile Connector

PF040-0110B-C15

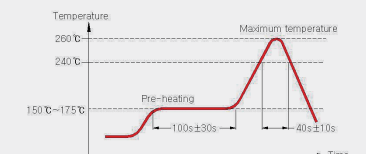
Product Specification

Ratings	Rated current	0.4A Max. (Signal) 13.0A Max (Power)	Operating temperature range	-35°C to +85°C 1)	Storage temperature range	+15°C to +35°C
	Rated voltage	40V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

- 1) Including terminal temperature rise.
2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC/FFC Specification T=0.30±0.03mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	200mΩ Max. / contact	Closed circuit Current : 500μA Open circuit voltage : 20mV Max.
2. Insulation resistance	50MΩ Min.	Test voltage : 100V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 120V for 1minute
4. FPC(FFC) retention force	3.0kgf Min.	Pull the FPC from a connector at a speed of 25mm/min and measured extraction force.
5. Durability	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact	Number of cycles : 10 cycles.
6. Vibration	No damage or mechanical defect No interruption over 1μ sec. Contact resistance : 100mΩ Max. / contact	Amplitude: 1.5mm Test current : DC 100mA Frequency: 10~55~10Hz Duration : X,Y,Z axis each 2 hours.
7. Shock	No damage or mechanical defect No interruption over 1μ sec.	Peak acceleration : 490% Half sine wave : (Duration : 11ms) Direction : 3direction (X,Y,Z) Number : 3times per each direction
8. Humidity	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact Insulation Resistance : 500MΩ Min.	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr
9. Thermal shock	No damage or mechanical defect Contact resistance : 100mΩ Max. / contact Insulation Resistance : 500MΩ Min.	Temperature : -55~25~85~25°C 5 cycles
10. Solder heat resistance	Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.	Reflow condition. (Refer to Reflow)



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Natural	UL94V-0
Actuator	PA	Black	UL94V-0
Contact Terminal A	Phosphor Bronze	Au over Nickel	-
Contact Terminal B	Phosphor Bronze	Au over Nickel	-
Power Terminal	Copper Alloy	Au over Nickel	-
Fitting Nail	Phosphor Bronze	Sn over Nickel	-

FPC/FFC Connector **FK**

Mobile Connector

PF040-0110B-C15

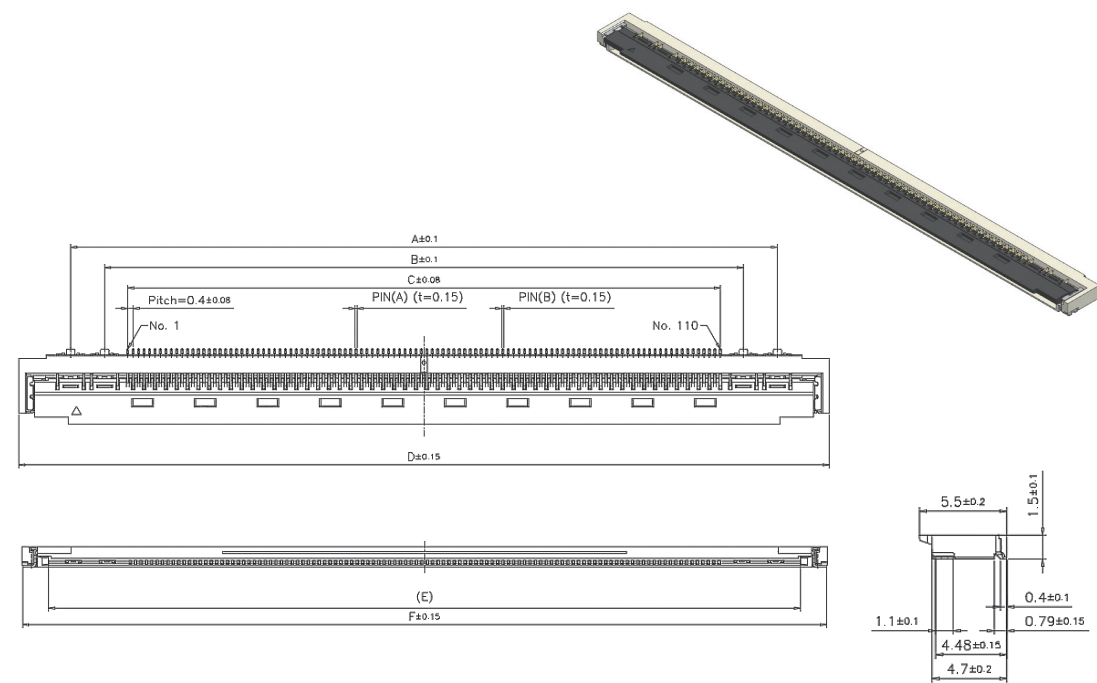
Product Number Structure

P F 040 - 0 110 B - C 15

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

- ① Type of connectors : FPC/FFC
- ② Style : FLIP
- ③ Contact Pitch : 0.40mm
- ④ Type : Open Type (Front Flip)
- ⑤ No. of position : 110p (Signal)
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting
- ⑧ Connector Height : 1.5mm

Product Drawing



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E	F
PF040-0110B-C15	110	52.0	47.0	43.6	59.62	55.66	59.52

Note 1 : Please place orders in full reel quantities. (1Reel = 2,500ea)

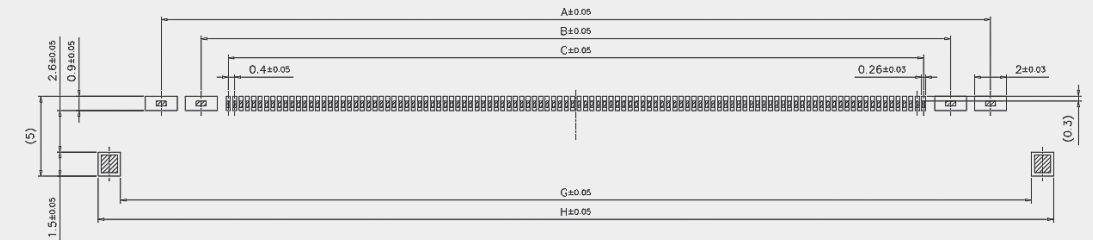
Note 2 : This connector has no polarity.

FPC/FFC Connector **FK**

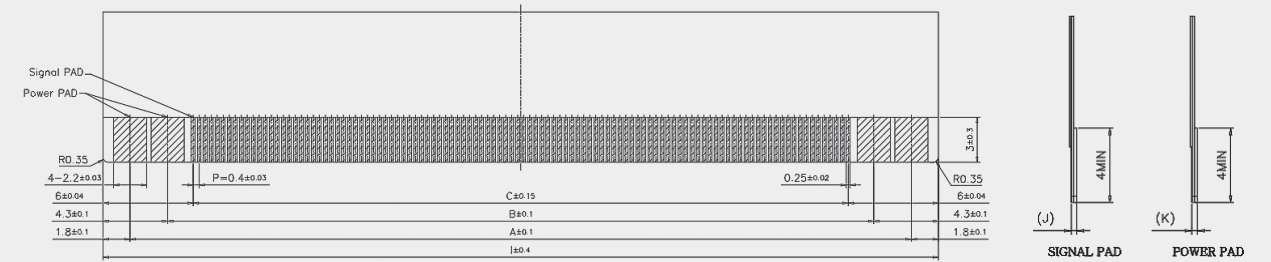
Mobile Connector

PF040-0110B-C15

Recommended PCB , Metal Mask Layout



Recommended FFC/FPC Dimensions



	Signal Pad		Power Pad		Remark
	Copper Foil	Thickness (J)	Copper Foil	Thickness (J)	
FFC	2oz	0.3±0.03	2oz	0.3±0.03	FFC Type1
	1oz	0.3±0.03	2oz	0.335±0.03	FFC Type2
FPC	2oz	0.3±0.03	2oz	0.3±0.03	

Unit : mm

Product No.	No. of Contacts	A	B	C	G	H	I
PF040-0110B-C15	110	52.0	47.0	43.6	57.12	59.92	55.6

Note 1 : Please place orders in full reel quantities. (1Reel = 2,500ea)

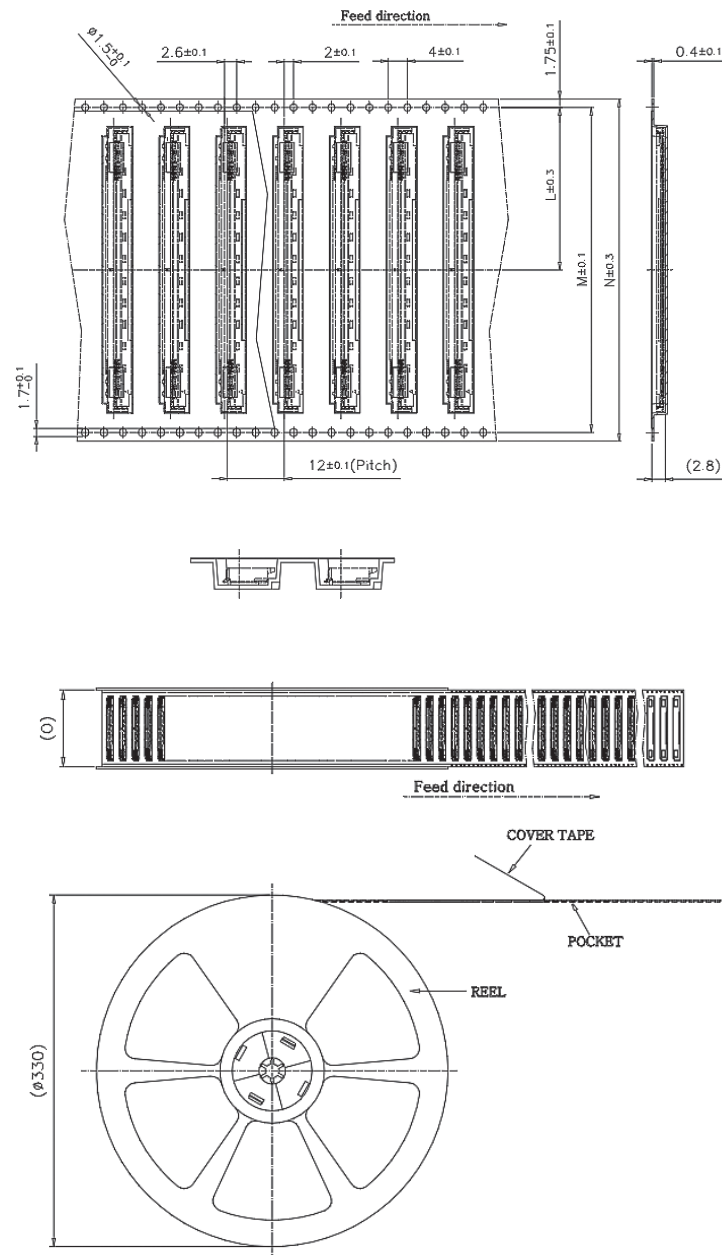
Note 2 : This connector has no polarity.

FPC/FFC Connector **FK**

Mobile Connector

PF040-0110B-C15

Packing Drawing



Unit : mm

Product No.	No. of Contacts	B	G	H	I
PF040-0110B-C15	110	34.2	68.4	72.0	73.4

Note 1 : Please place orders in full reel quantities. (1Reel = 2,500ea)

Note 2 : This connector has no polarity.

FPC/FFC Connector **FB**

Mobile Connector

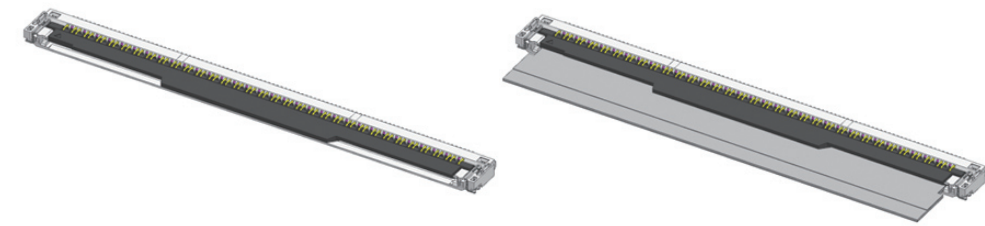
FF050-096B-C15-A

Applications

- ▶ LCD/LED TV
- ▶ Displays such as automobile infotainment

Characteristics

- ▶ Space-saving design
- ▶ Lock-type FPC/FFC Cable available
- ▶ Front-flip Mechanism
- ▶ Enhanced contact reliability



- ▶ Suitable for Space-saving design
- ▶ Reliable 2-point Signal contact design
- ▶ Applicable for FPC/FFC thickness is 0.30±0.05mm

Specifications

Current Rating	Contact Resistance	Dielectric Strength	Temperature Range
0.5 A Max.	40mΩ (Max.)	AC 500V	-20°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGHT	CODE
96	0.5	5.2	1.5	54.10	FF050-096B-C15-A

FPC/FFC Connector **FB**

Mobile Connector

FF050-096B-C15-A

Product Specification

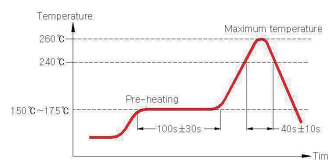
Ratings	Rated current	0.5A Max.	Operating temperature range	-20°C to +85°C 1)	Storage temperature range	+15°C to +35°C
	Rated voltage	50V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

- 1) Including terminal temperature rise.
- 2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC/FFC Specification T=0.30±0.05mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	40mΩ Max.	Open circuit voltage : 20mV Max.
2. Insulation resistance	50MΩ Min.	Test voltage : 100V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 250V for 1minute
4. Durability	No damage or mechanical defect Contact resistance : 60mΩ Max.	Number of cycles : 20 cycles.
5. Vibration	No damage or mechanical defect Contact resistance : 60mΩ Max.	Amplitude : 1.5mm Test current : DC 100mA Frequency : 10-55-10Hz Duration : X,Y,Z axis each 2 hours.
6. Hige Temperature	No damage or mechanical defect Contact resistance : 60mΩ Max. No flashover or dielectric breakdown	Temperature : 85°C±2°C Duration : 96hr
7. Cold	No damage or mechanical defect Contact resistance : 60mΩ Max. No flashover or dielectric breakdown	Temperature : -40°C±3°C Duration : 48hr
8. Humidity	No damage or mechanical defect Contact resistance : 60mΩ Max. No flashover or dielectric breakdown	Temperature : 40°C±2°C Humidity : 90% ~ 95% Duration : 96hr

9. Solder heat resistance	Visual inspection : Connector shall meet the design and dimensional requirement3. s of each drawings.	Reflow condition. [Refer to Reflow]
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Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Natural	UL94V-0
Actuator	PPS	Black	UL94V-0
Contact Terminal A	Phosphor Bronze	Au over Nickel	-
Contact Terminal B	Phosphor Bronze	Au over Nickel	-
Fitting Nail	Phosphor Bronze	Sn over Nickel	-

FPC/FFC Connector **FB**

Mobile Connector

FF050-096B-C15-A

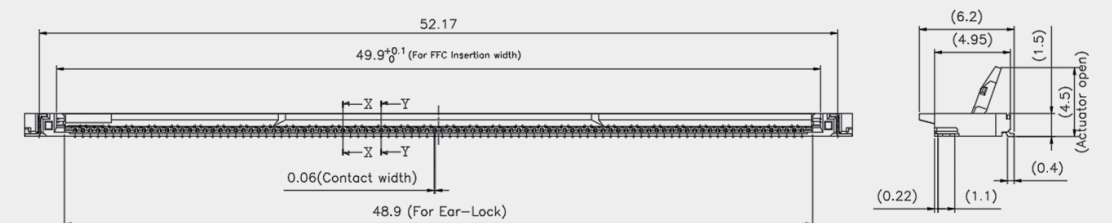
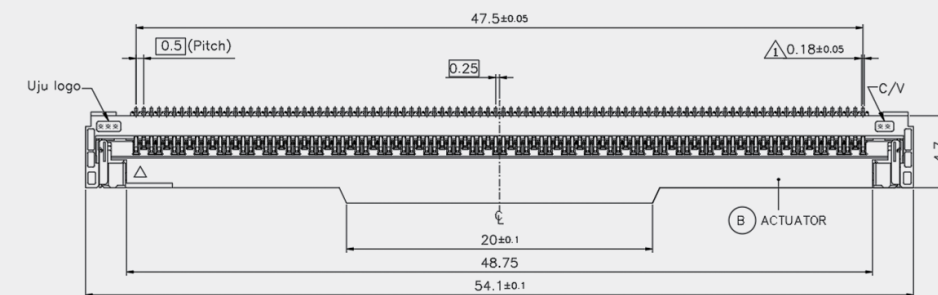
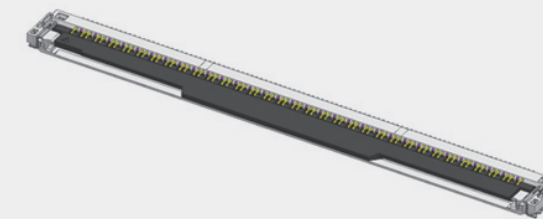
Product Number Structure

F F 050 - 096 B - C 15 - A

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Type of connectors : FPC/FFC	② Style : FLIP
③ Contact Pitch : 0.50mm	④ Type : Open Type (Front Flip)
⑤ No. of position : 96p	⑥ Test of on board : Board on
⑦ Shape symbol : With Fitting	⑧ Connector Height : 1.5mm
	⑨ Option : Variation [A]

Product Drawing

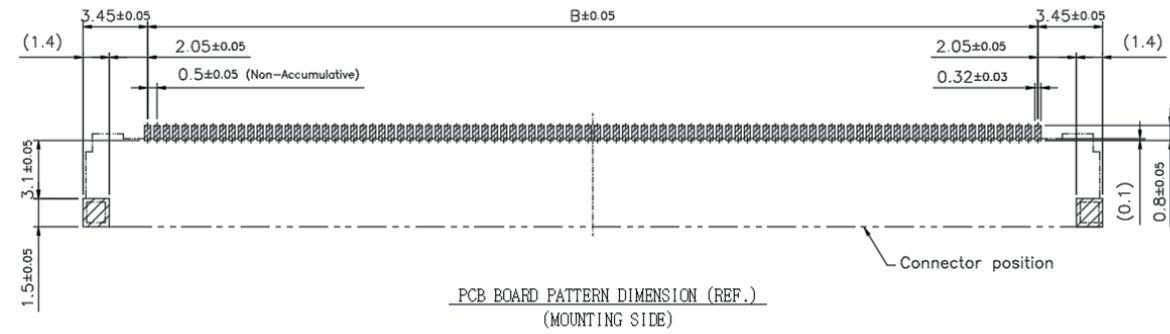


FPC/FFC Connector **FB**

Mobile Connector

FF050-096B-C15-A

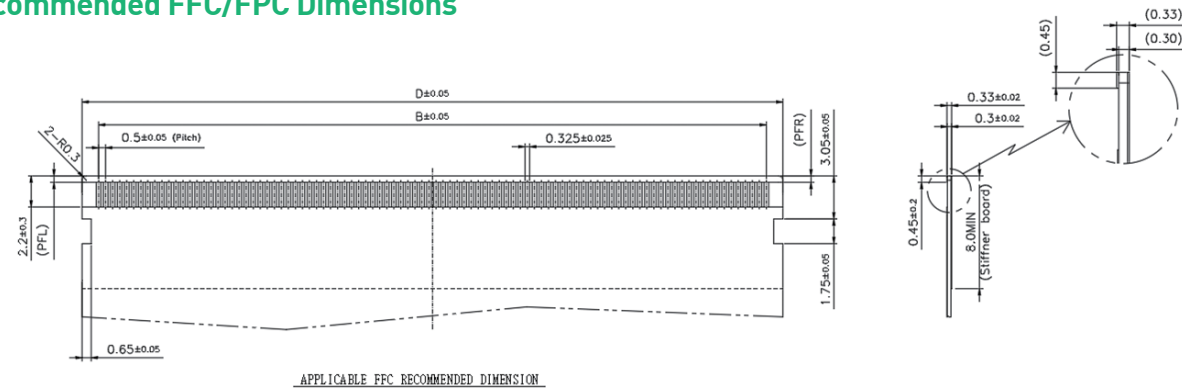
Recommended PCB , Metal Mask Layout



【DIMENSION TABLE】

Product Name	Product Number	No. of Conctcs	B	D
FB	FF050-096B-C15-A	96	47.5	49.85

Recommended FFC/FPC Dimensions



Unit : mm

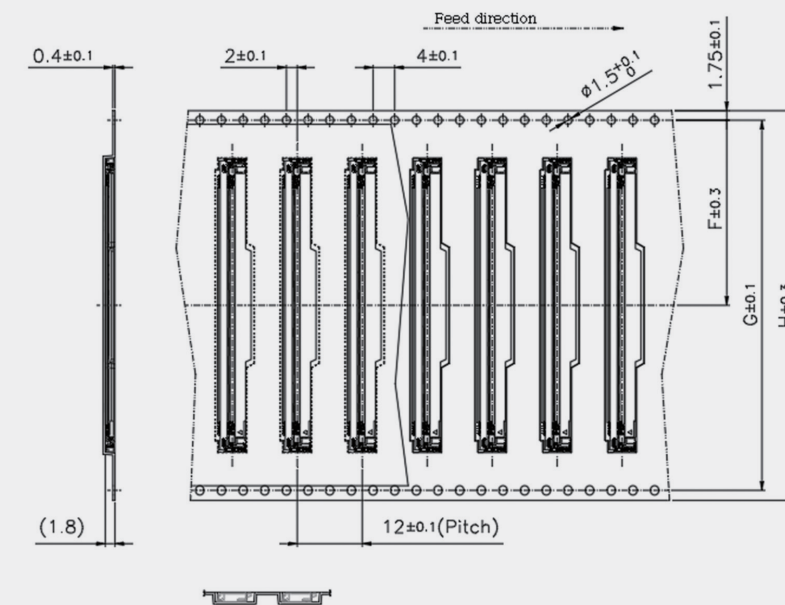
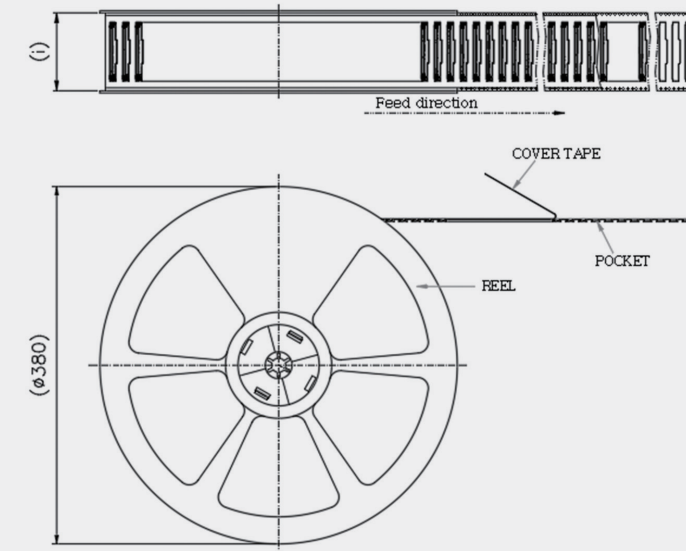
Product No.	No. of Contacts	B	D
FF050-096B-C15-A	96	47.5	49.85

FPC/FFC Connector **FB**

Mobile Connector

FF050-096B-C15-A

Packing Drawing



Unit : mm

Product No.	No. of Contacts	A	B	C	D
FF050-096B-C15-A	96	34.2	68.4	72	73.4

Note 1 : Please place orders in full reel quantities. (1Reel = 2,000ea)

Note 2 : This connector has no polarity.

FPC/FFC Connector **EROS**

Display Connector

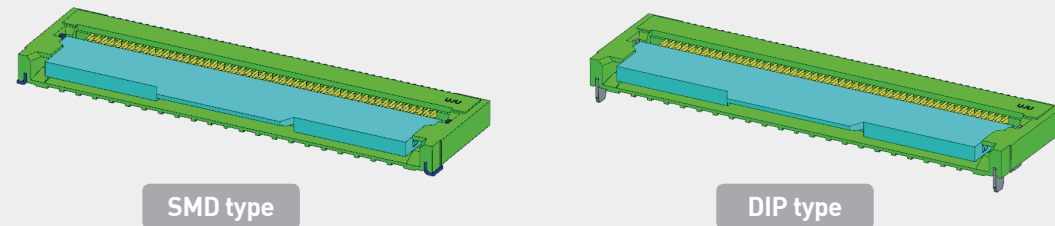
PF050-0xxB-C20-x

Applications

- ▶ LCD/LED TV
- ▶ Displays such as automobile infotainment

Characteristics

- ▶ Space-saving design
- ▶ Lock-type FPC/FFC Cable available
- ▶ Front-flip Mechanism
- ▶ Enhanced contact reliability



SMD type

DIP type

- ▶ Space-saving design
- ▶ Two SMT Type (SMD, DIP)
- ▶ Reliable 2-point Signal contact design
- ▶ Applicable for FPC/FFC thickness is 0.32±0.03mm

Specifications

Current Rating	Contact Resistance	Dielectric Strength	Temperature Range
0.5A/Pin	30mΩ (Max.)	AC 250V	-45°C ~ 85°C

Mating Size & Product No.

PINS	PITCH	WIDTH	HEIGHT	LENGTH	CODE
51 SMD				30.4	
68 SMD DIP				38.9	
80 SMD DIP	0.5	8.4	2.2	44.9	PF050-0xxB-C20-x
96 DIP				52.9	

FPC/FFC Connector **EROS**

Display Connector

PF050-0xxB-C20-x

Product Specification

Ratings	Rated current	0.5A Max.	Operating temperature range	-45°C to +85°C 1)	Storage temperature range	+15°C to +35°C
	Rated voltage	50V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

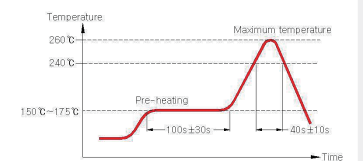
1) Including terminal temperature rise.

2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC/FFC Specification T=0.32±0.03mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	30mΩ Max. / contact	Closed circuit Current : 500μA Open circuit voltage : 20mV Max.
2. Insulation resistance	100MΩ Min.	Test voltage : 100V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 250V for 1minute
4. Actuator Open Force	0.0075kgf × N Min. (N= Pins)	Actuator open test shall be done with film inserted.
5. Withdrawal Force (Horizontal direction)	0.025kgf × N Min. (N= Pins)	An applicable FFC(FPC) shall be pulled from a connector at a speed of 25mm/min and measured extraction force.
6. Vibration	No damage or mechanical defect Contact resistance : 50mΩ Max. / contact	Number of cycles : 20 cycles.
7. Vibration	No damage or mechanical defect No interruption over 1μ sec. Contact resistance : 50mΩ Max. / contact	Amplitude : 1.5mm Test current : DC 100mA Frequency : 10-55-10Hz Duration : X,Y,Z axis each 2 hours.
8. Shock	No damage or mechanical defect No interruption over 1μ sec.	Peak acceleration : 490%g Half sine wave : [Duration : 11ms] Direction : 3direction (X,Y,Z) Number : 3times per each direction
9. Humidity	No damage or mechanical defect Contact resistance : 50mΩ Max. / contact Insulation Resistance : 100MΩ Min.	Temperature : 40°C±2°C Relative humidity : 90% RH to 95% RH Duration : 96hr
10. Thermal shock	No damage or mechanical defect Contact resistance : 50mΩ Max. / contact Insulation Resistance : 100MΩ Min.	- 40±3(°C) : 30 minutes → 85±2(°C) : 30 minutes, 96 cycles

11. Solder heat resistance	Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.	Reflow condition. (Refer to Reflow)
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Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Natural	UL94V-0
Actuator	PA	Black	UL94V-0
Contact Terminal A	Phosphor Bronze	Au over Nickel	-
Fitting Nail	Phosphor Bronze	Sn over Nickel	-

FPC/FFC Connector **EROS**

Display Connector

PF050-0xxB-C20-x

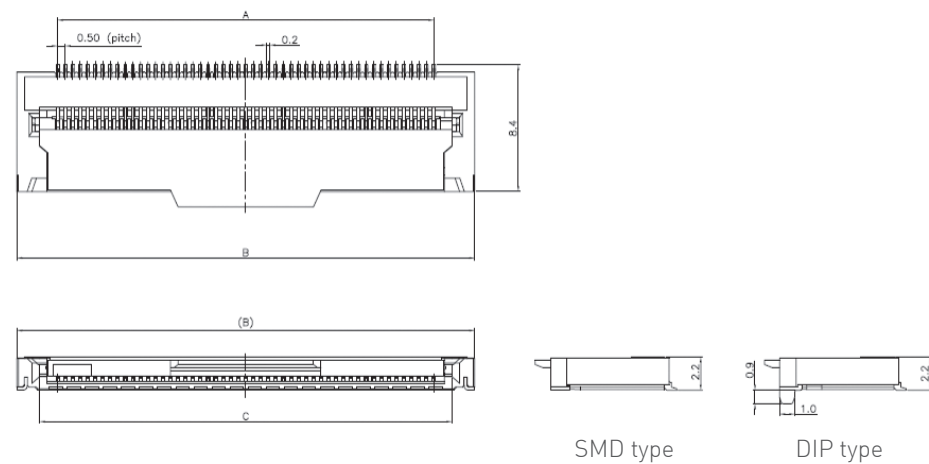
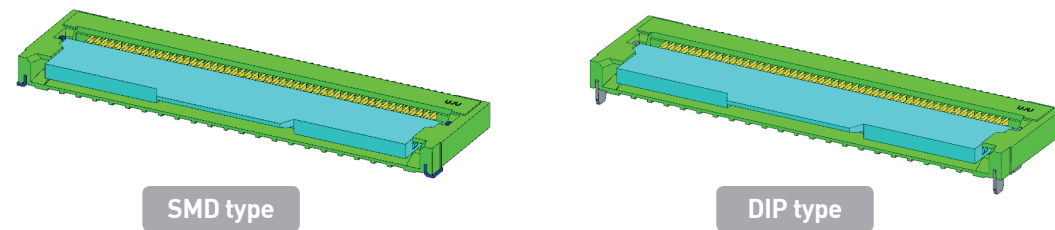
Product Number Structure

P **F** **050** - **0xx** **B** - **C** **20** - **x**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

- ① Type of connectors : FPC/FFC
- ② Style : FLIP
- ③ Contact Pitch : 0.50mm
- ④ Type : Open Type (Front Flip)
- ⑤ No. of position : 51 , 68 , 96p
- ⑥ Test of on board : Board on
- ⑦ Shape symbol : With Fitting
- ⑧ Connector Height : 2.2mm
- ⑨ Modification Code : B (Dip Type) , C (SMD Type)

Product Drawing



Unit : mm

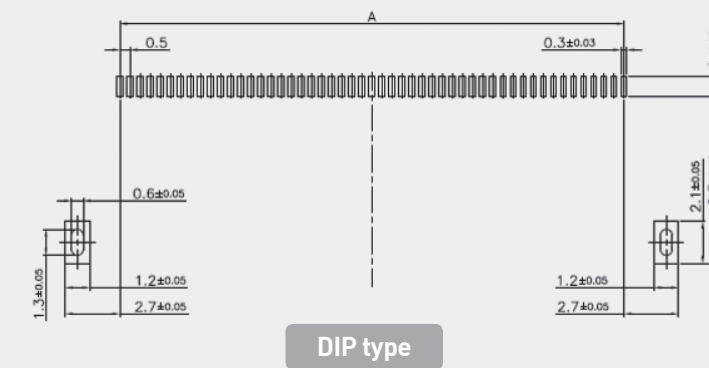
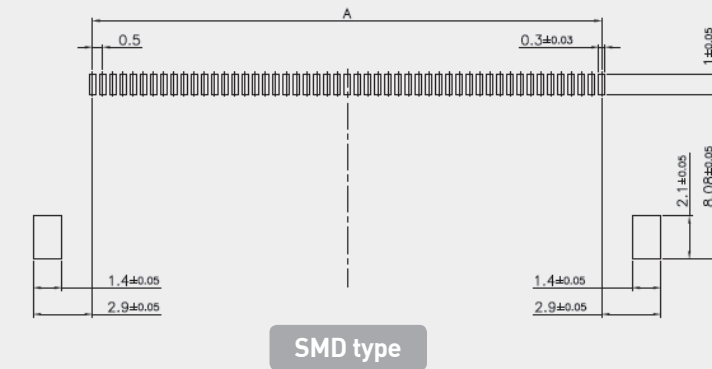
Product No.	No. of Contacts	A	B	C	D
PF050-0xxB-C20-x	51 SMD	25	30.4	27.4	27.375
	68 SMD DIP	33.5	38.9	35.9	35.875
	80 SMD DIP	39.5	44.9	41.9	41.875
	96 DIP	47.5	52.9	49.9	49.875

FPC/FFC Connector **EROS**

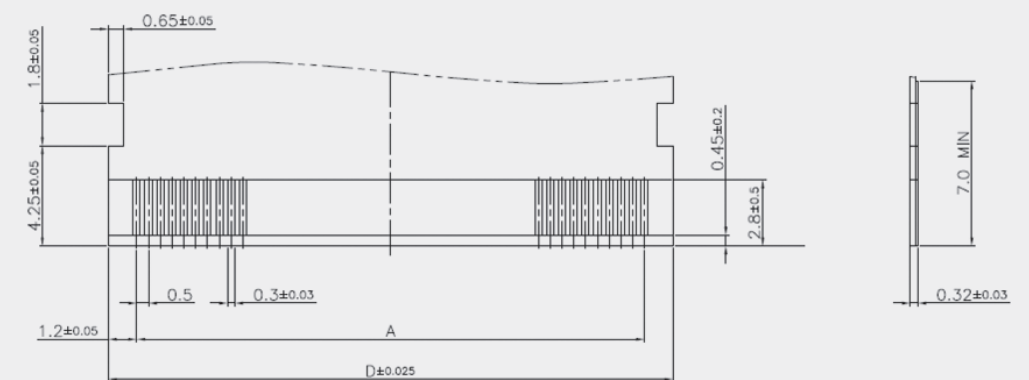
Display Connector

PF050-0xxB-C20-x

Recommended PCB , Metal Mask Layout



Recommended FFC/FPC Dimensions



Unit : mm

Product No.	No. of Contacts	A	B	C	D
PF050-0xxB-C20-x	51 SMD	25	30.4	27.4	27.375
	68 SMD DIP	33.5	38.9	35.9	35.875
	80 SMD DIP	39.5	44.9	41.9	41.875
	96 DIP	47.5	52.9	49.9	49.875

FPC/FFC Connector **0.5 FPC**

Display Connector

PF050-0xxB-C20-H

Product Specification

Ratings	Rated current	0.5A Max.	Operating temperature range	-45°C to +85°C 1)	Storage temperature range	+15°C to +35°C
	Rated voltage	50V r.m.s	Operating humidity range	85%RH 2)	Storage humidity range	65%RH

1) Including terminal temperature rise.

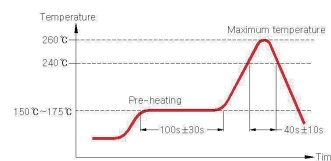
2) Storage area is to be free of corrosive gases and dew formation.

Applicable FPC/FFC Specification T=0.32±0.03mm, Gold Plated

Items	Specifications	Conditions
1. Contact resistance	30mΩ Max. / contact	Closed circuit Current : 500μA Open circuit voltage : 20mV Max.
2. Insulation resistance	100MΩ Min.	Test voltage : 100V D.C.
3. Withstanding voltage	No flashover or dielectric breakdown	AC 250V for 1minute
4. Actuator Open Force	0.0075kgf × N Min. (N=Pins)	Actuator open test shall be done with film inserted.
5. Withdrawal Force (Horizontal direction)	0.025kgf × N Min. (N=Pins)	An applicable FFC(FPC) shall be pulled from a connector at a speed of 25mm/min and measured extraction force.
6. Vibration	No damage or mechanical defect Contact resistance : 50mΩ Max. / contact	Number of cycles : 20 cycles.
7. Vibration	No damage or mechanical defect No interruption over 1μ sec. Contact resistance : 50mΩ Max. / contact	Amplitude : 1.5mm Test current : DC 100mA Frequency : 10-55-10Hz Duration : X,Y,Z axis each 2 hours.
8. Shock	No damage or mechanical defect No interruption over 1μ sec.	Peak acceleration : 490%g Half sine wave : [Duration : 11ms] Direction : 3direction [X,Y,Z] Number : 3times per each direction
9. Humidity	No damage or mechanical defect Contact resistance : 50mΩ Max. / contact Insulation Resistance : 100MΩ Min.	Temperature : 40°C±2°C Relative humidity : 90% RH to 95% RH Duration : 96hr
10. Thermal shock	No damage or mechanical defect Contact resistance : 50mΩ Max. / contact Insulation Resistance : 100MΩ Min.	- 40±3(°C) : 30 minutes → 85±2(°C) : 30 minutes, 96 cycles

11. Solder heat resistance
Visual inspection : Connector shall meet the design and dimensional requirements of each drawings.

Reflow condition.
[Refer to Reflow]



Materials / Finish

Part	Materials	Finish	UL Regulation
Base	LCP	Natural	UL94V-0
Actuator	PA	Black	UL94V-0
Contact Terminal A	LCP	Au over Nickel	-
Fitting Nail	Phosphor Bronze	Sn over Nickel	-

FPC/FFC Connector **0.5 FPC**

Display Connector

PF050-0xxB-C20-H

Product Number Structure

P F 050 - 0xx B - C 20 - H

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Type of connectors : FPC/FFC

② Style : FLIP

③ Contact Pitch : 0.50mm

④ Type : Open Type (Front Flip)

⑤ No. of position : 68 , 80 , 96p

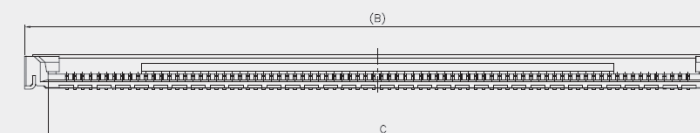
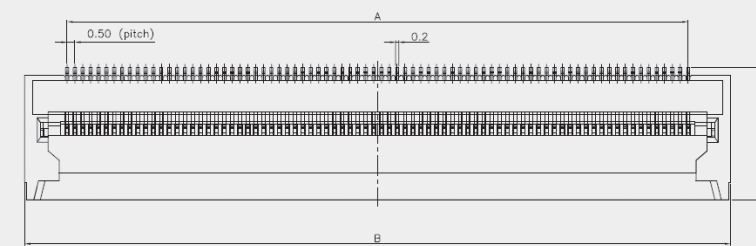
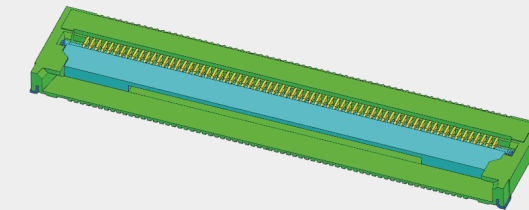
⑥ Test of on board : Board on

⑦ Shape symbol : With Fitting

⑧ Connector Height : 2.2mm

⑨ Modification Code

Product Drawing



Unit : mm

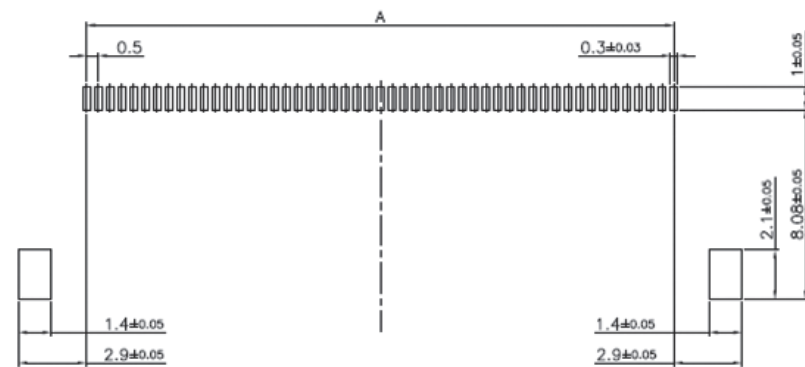
Product No.	No. of Contacts	A	B	C	D
PF050-0xxB-C20-H	68	33.5	38.9	35.9	35.8
	80	39.5	44.9	41.9	41.8
	96	47.5	52.9	49.9	49.8

FPC/FFC Connector 0.5 FPC

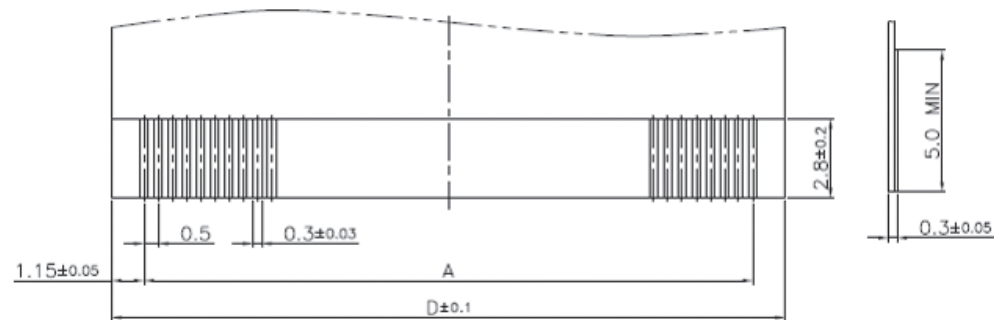
Display Connector

PF050-0xxB-C20-H

Recommended PCB , Metal Mask Layout



Recommended FFC/FPC Dimensions



Unit : mm

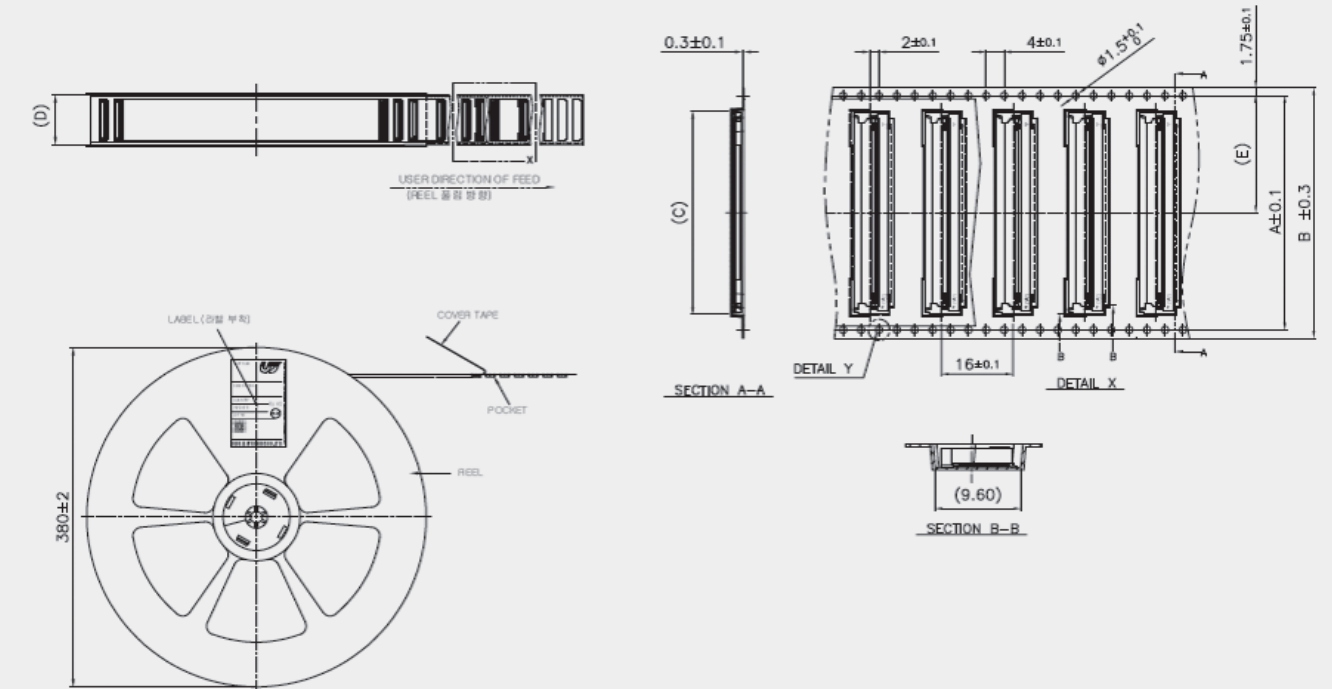
Product No.	No. of Contacts	A	B	C	D
PF050-0xxB-C20-H	68	33.5	38.9	35.9	35.8
	80	39.5	44.9	41.9	41.8
	96	47.5	52.9	49.9	49.8

FPC/FFC Connector 0.5 FPC

Display Connector

PF050-0xxB-C20-H

Packing Drawing



Unit : mm

Product No.	No. of Contacts	A	B	C	D	E
PF050-0xxB-C20-H	68	52.4	56.0	39.85	57.4	26.2
	80	52.4	56.0	45.75	57.4	26.2
	96	68.4	72.0	53.9	73.4	34.2

Note 1 : Please place orders in full reel quantities. (1Reel = 2,000ea)

Note 2 : This connector has no polarity.

Globalization

Professional company

leading IT industry in the connector sector

Product Specialized connector for mobile and LCD TV/Monitor, etc.

Price Competitive price, cost innovation

Place Perfect positioning for market demand

Promotion Advertising & marketing with overseas network



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