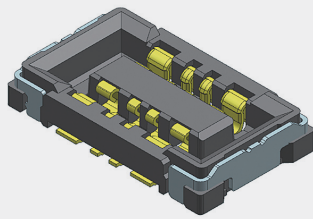
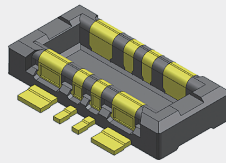
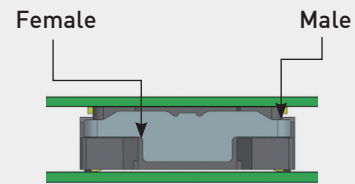


# Board To Board Connector

**PA**
**Applications** | Smart Phone, Smart Watch, Tablet PC, Mobile Devices, Wearable Devices

**Female**

**Male**

**Mated**

- ▶ 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

## Code & Specification

Mating Size / Unit : (mm)

Product Code	Pitch (mm)	No. of Contacts	Width (mm)	Height (mm)	Length	Remark
BF240-I08B-C08	2.40	8	2.50	0.80	4.20	Receptacle
BM240-I08B-C08	2.40	8	2.50	0.80	4.20	Plug

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

# Board To Board Connector



**Applications** | Smart Phone, Smart Watch, Tablet PC, Mobile Devices, Wearable Devices

## 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

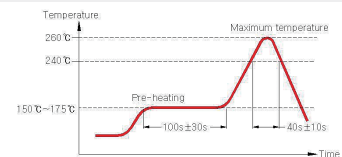
1) Including terminal temperature rise.

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	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 <sup>2</sup> ) - 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)



## 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	-

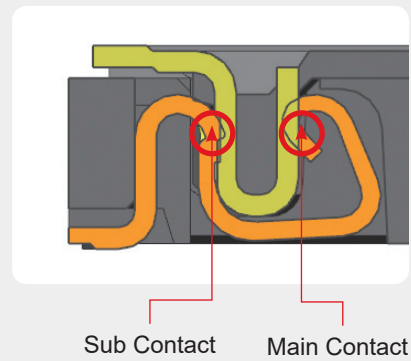
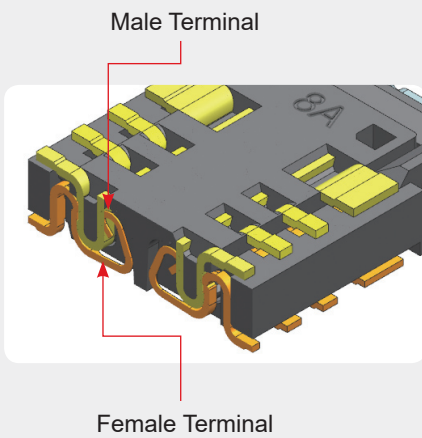
# Board To Board Connector

PA

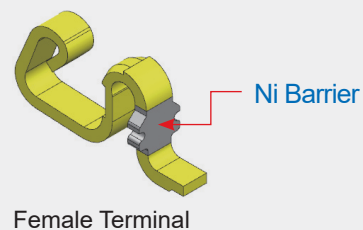
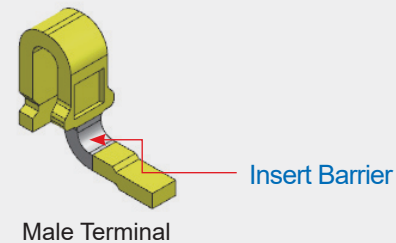
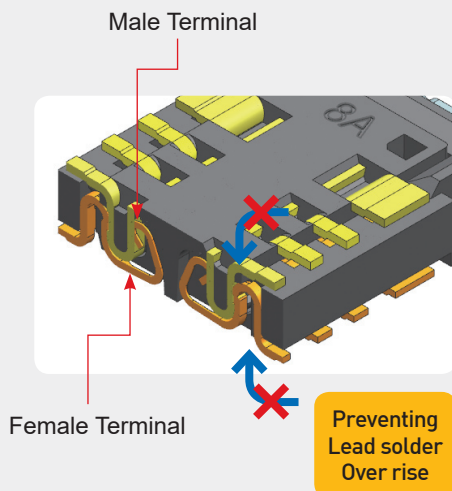
Applications | Smart Phone, Smart Watch, Tablet PC, Mobile Devices, Wearable Devices

## FEATURES AND ADVANTAGES

- ▶ Double Contact point for stable contact preservation



- ▶ Insert or Ni Barrier for preventing Lead solder over rise



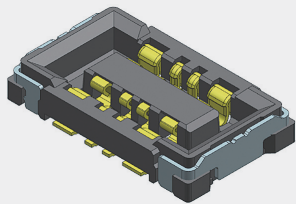
# Board To Board Connector



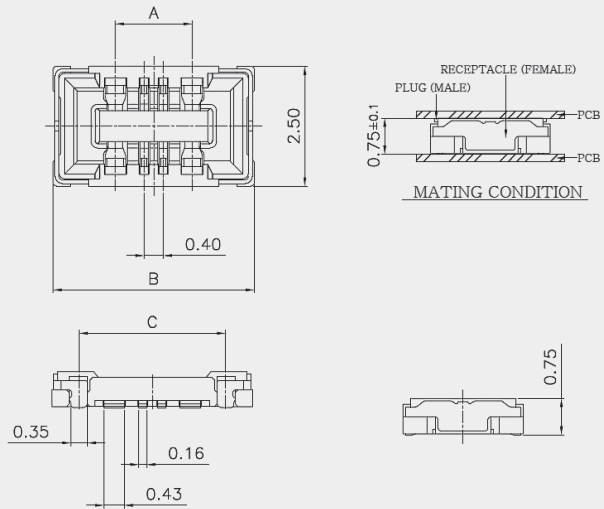
Applications | Smart Phone, Smart Watch, Tablet PC, Mobile Devices, Wearable Devices

## TYPE : RECEPTACLE (FEMALE)

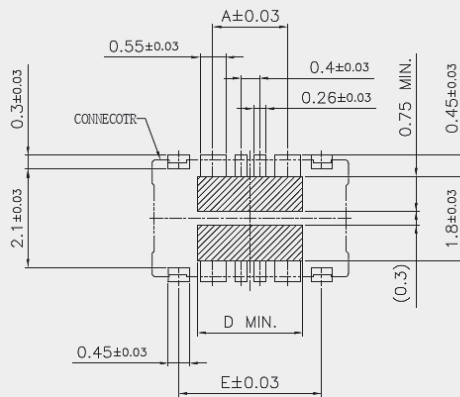
### Product Drawing



Female (Receptacle)



### Recommended PCB , Metal Mask Layout



【 APPLICABLE P.C.B DIMENSION 】  
 (RECOMMEND Thickness of Metal Mask : 0.10mm)  
 (RECOMMEND open aperture ratio of metal mask : 80%)

Mating Size / Unit : (mm)

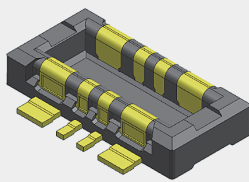
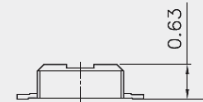
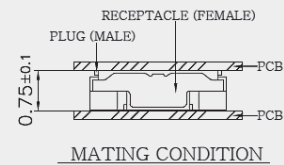
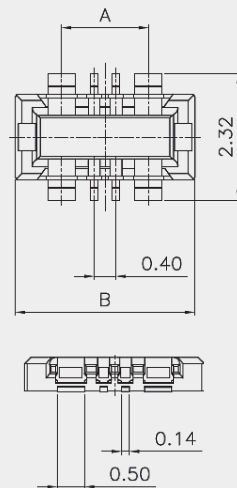
Product No.	No. of Contacts	A	B	C	D	E
BF240-I08B-C08	Signal 4, Power 4	1.60	4.20	3.06	2.25	3.06

# Board To Board Connector

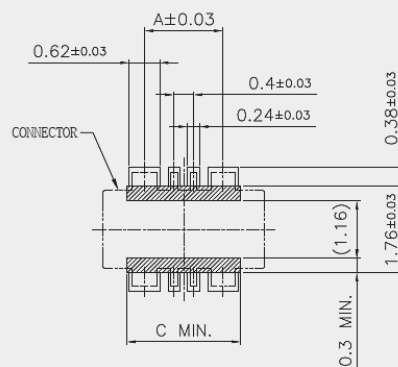
**PA**
**Applications** | Smart Phone, Smart Watch, Tablet PC, Mobile Devices, Wearable Devices

## TYPE : PLUG (MALE)

### Product Drawing


**Male (Plug)**


### Recommended PCB , Metal Mask Layout



【 APPLICABLE P.C.B DIMENSION 】  
 (RECOMMEND Thickness of Metal Mask : 0.10mm)  
 (RECOMMEND open aperture ratio of metal mask : 80%)

Mating Size / Unit : (mm)

Product No.	No. of Contacts	A	B	C
BM240-I08B-C08	Signal 4, Power 4	1.60	3.30	2.32