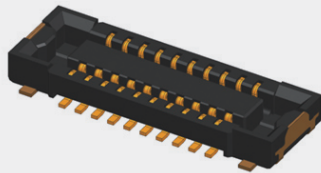


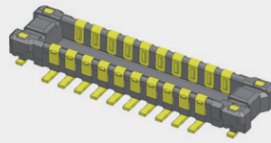
# Board To Board Connector



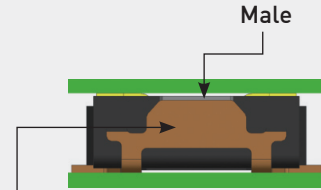
**Applications** | Smart Phone, Smart Watch, Tablet PC, Mobile Devices, Wearable Devices



Female



Male



Female

Mated

- ▶ For contact stability, Double Contact and Bellows Type Contact Structure.
- ▶ 0.40mm pitch, 0.80mm slim stacking design for saving space.
- ▶ Male Terminal / Female Fitting Nail Insert Structure.

## Code & Specification

Mating Size / Unit : (mm)

Product Code	Pitch (mm)	No. of Contacts	Width (mm)	Height (mm)	Length	Remark
BF040-I10B-C08-A	0.40	10	2.50	0.75	4.50	Receptacle
BM040-I10B-C08-A	0.40	10	2.50	0.75	4.50	Plug
BF040-I12B-C08-A	0.40	12	2.50	0.75	4.90	Receptacle
BM040-I12B-C08-A	0.40	12	2.50	0.75	4.90	Plug
BF040-I16B-C08-A	0.40	16	2.50	0.75	5.70	Receptacle
BM040-I16B-C08-A	0.40	16	2.50	0.75	5.70	Plug
BF040-I24B-C08-A	0.40	24	2.50	0.75	7.30	Receptacle
BM040-I24B-C08-A	0.40	24	2.50	0.75	7.30	Plug
BF040-I30B-C08-A	0.40	30	2.50	0.75	8.50	Receptacle
BM040-I30B-C08-A	0.40	30	2.50	0.75	8.50	Plug
BF040-I34B-C08-A	0.40	34	2.50	0.75	9.30	Receptacle
BM040-I34B-C08-A	0.40	34	2.50	0.75	9.30	Plug

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

# Board To Board Connector



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

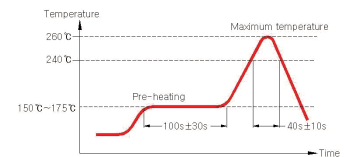
## Product Specification

Ratings	Rated current	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	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	-

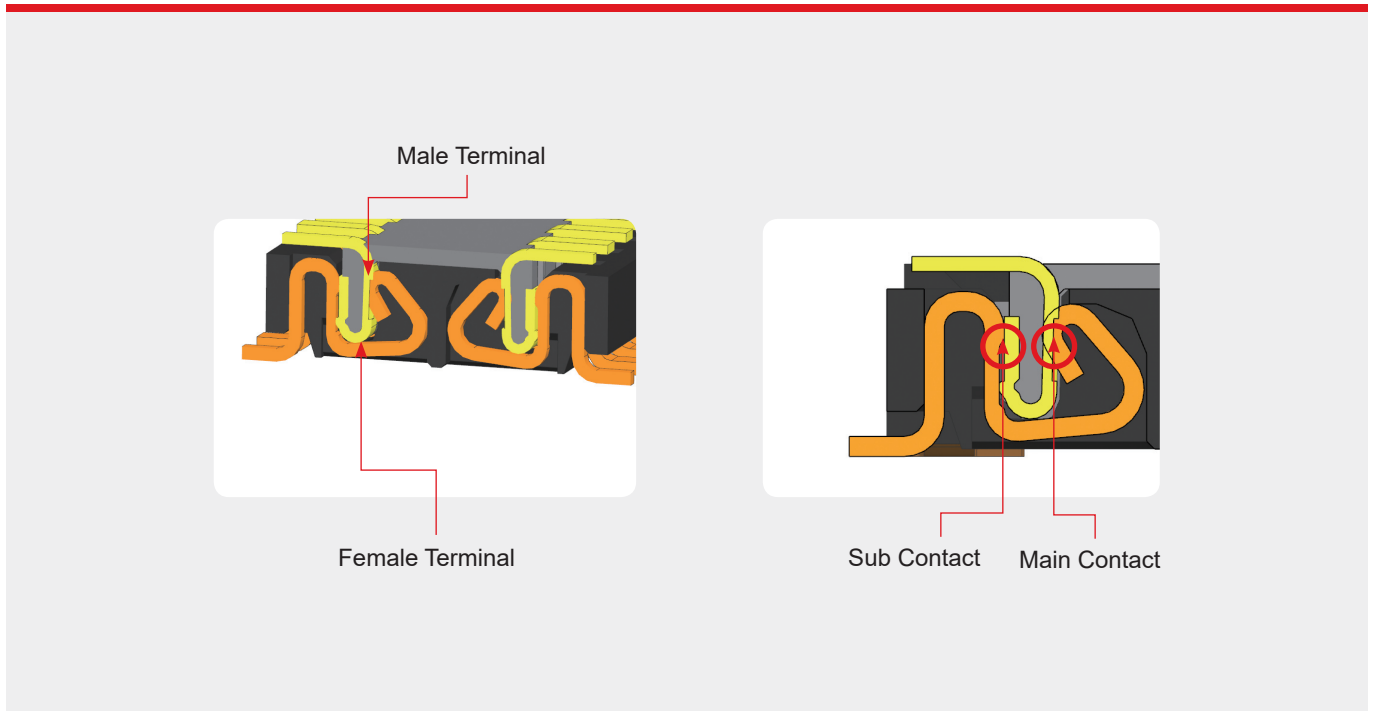
# Board To Board Connector



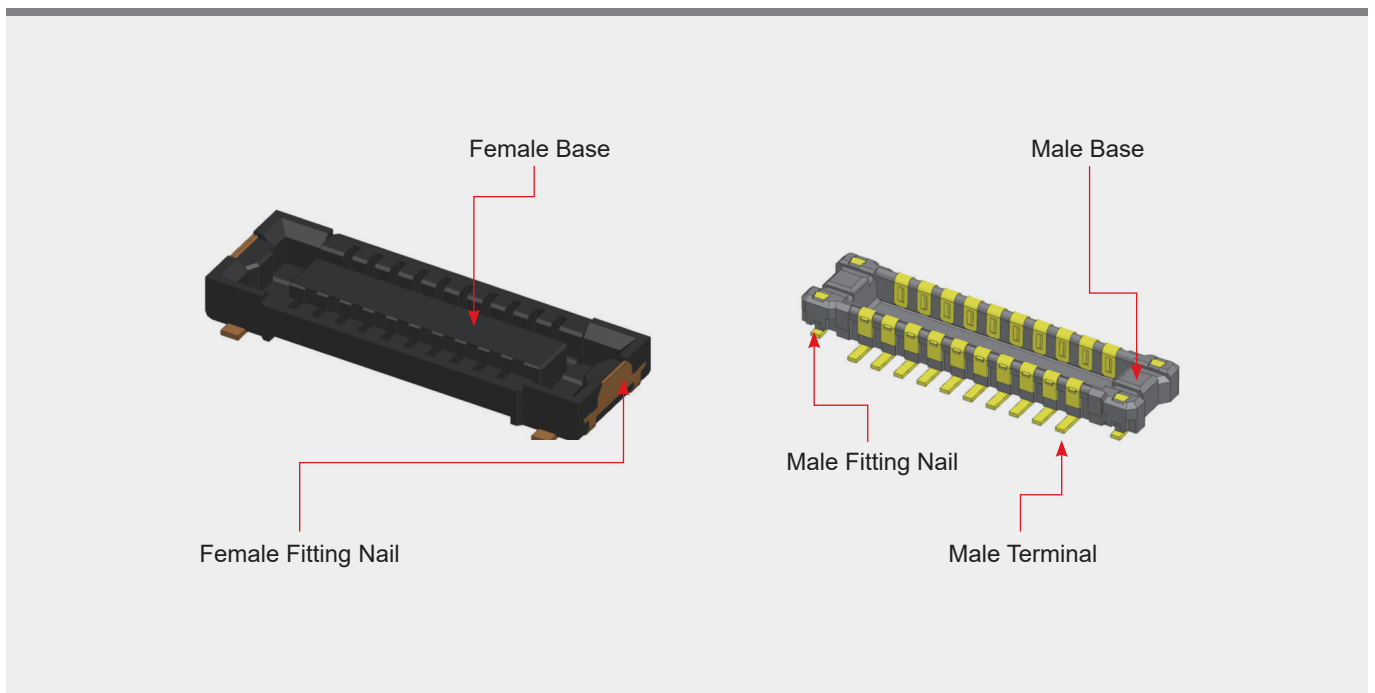
Applications | Smart Phone, Smart Watch, Tablet PC, Mobile Devices, Wearable Devices

## FEATURES AND ADVANTAGES

- ▶ Double Contact point for stable contact preservation



- ▶ Insert mold Structure



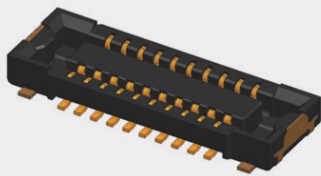
# Board To Board Connector



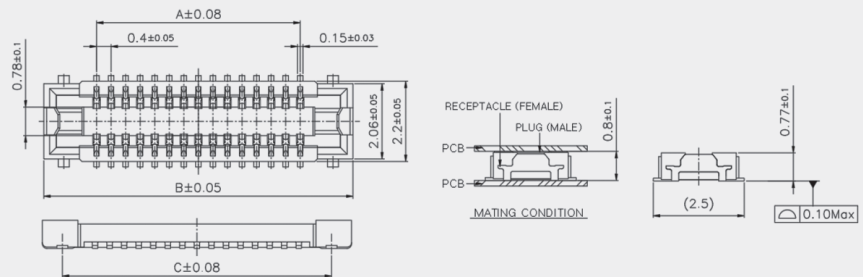
Applications | Smart Phone, Smart Watch, Tablet PC, Mobile Devices, Wearable Devices

## TYPE : RECEPTACLE (FEMALE)

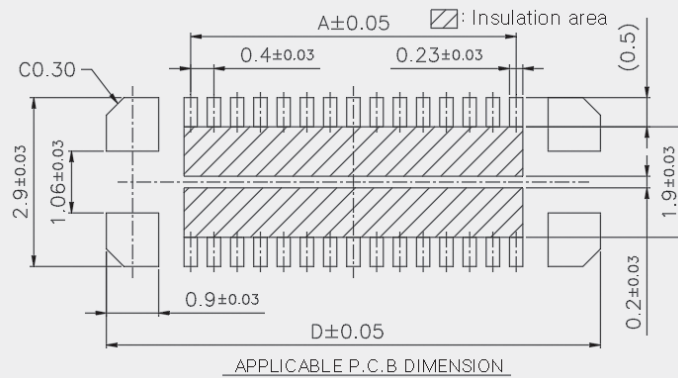
### Product Drawing



Female (Receptacle)



### Recommended PCB , Metal Mask Layout



Mating Size / 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

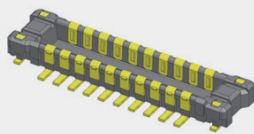
# Board To Board Connector



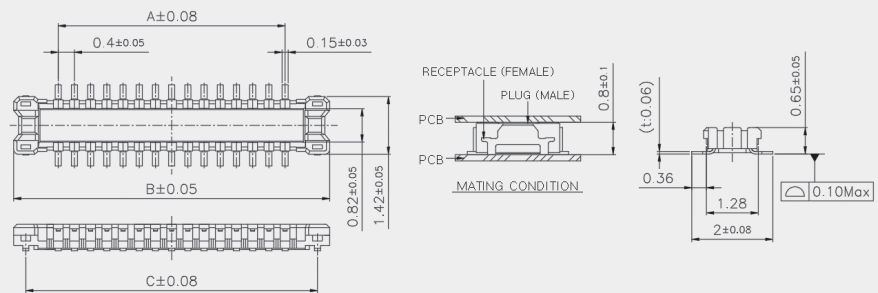
Applications | Smart Phone, Smart Watch, Tablet PC, Mobile Devices, Wearable Devices

## TYPE : PLUG (MALE)

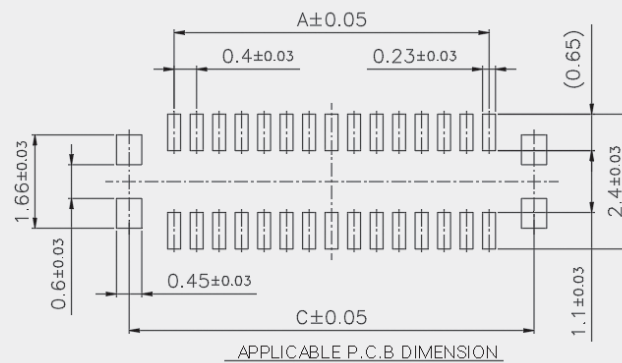
### Product Drawing



Male (Plug)



### Recommended PCB , Metal Mask Layout



Mating Size / 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