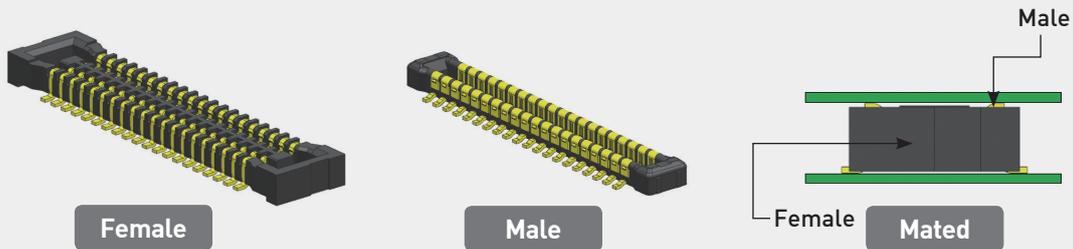


Board To Board Connector

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


- ▶ For contact stability, Double Contact and Bellows Type Contact Structure
- ▶ 0.9mm stacking height and width of 2.4mm for saving space
- ▶ There is little dead space as metal is not exposed on the back of the connector Male
- ▶ RoHS compliant product

Code & Specification

Mating Size / Unit : (mm)

Product Code	Pitch (mm)	No. of Contacts	Width (mm)	Height (mm)	Length	Remark
BF040-I40B-N09-C	0.40	40	2.40	0.90	0	Receptacle
BM040-I40B-N09-C	0.40	40	2.40	0.90	0	Plug

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

Board To Board Connector

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

Product Specification

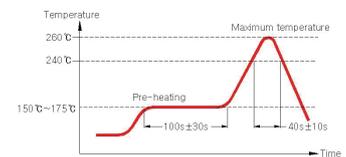
Ratings	Rated current	0.3A	Operating temperature range	-35°C to +85°C 1	Storage temperature range	+15°C to +35 °C
	Rated voltage	30V AC(RMS) / DC	Operating humidity range	70%RH Max.2	Storage humidity range	65%RH Max. 2

1) Including terminal temperature rise.

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

Items	Specifications	Conditions
1. Contact resistance	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	-

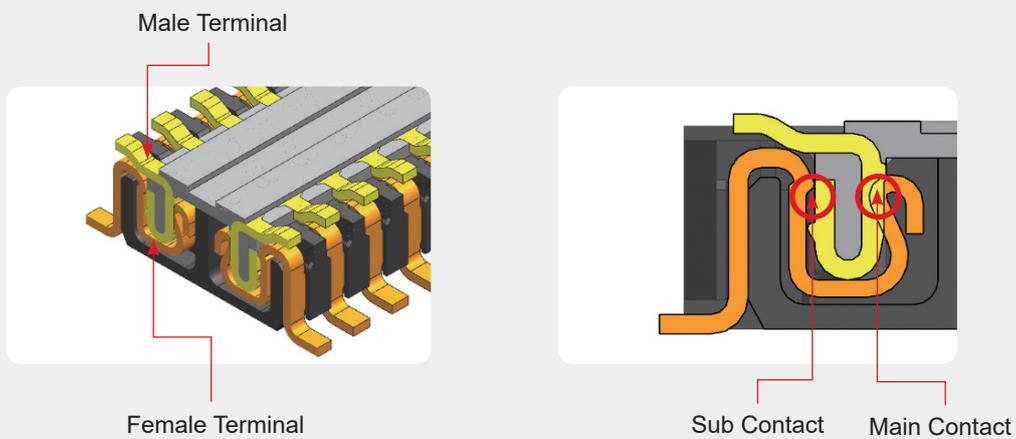
Board To Board Connector

THIN

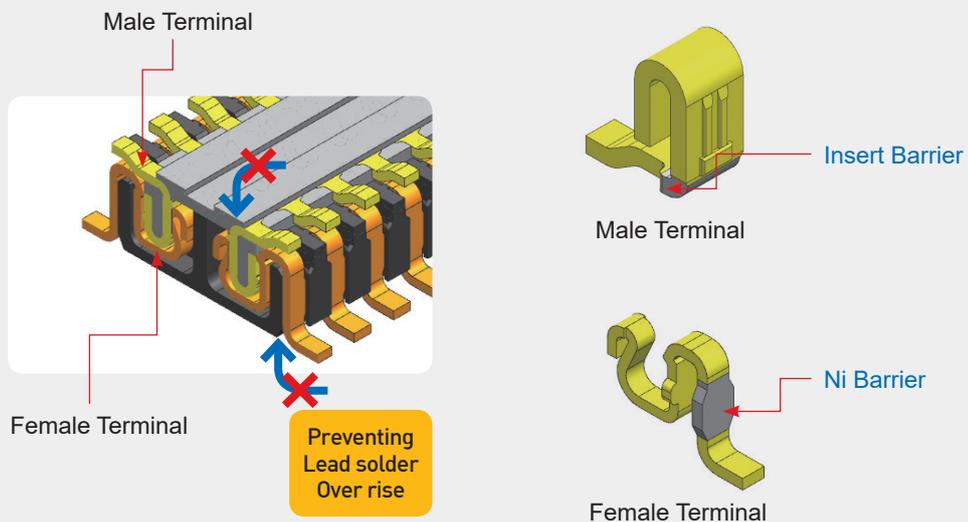
Applications | Smart Phone, Smart Watch, Tablet PC, Mobile Devices, Wearable Devices

FEATURES AND ADVANTAGES

- Double Contact point for stable contact preservation



- Ni Barrier for preventing Lead solder over rise



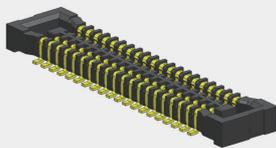
Board To Board Connector

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

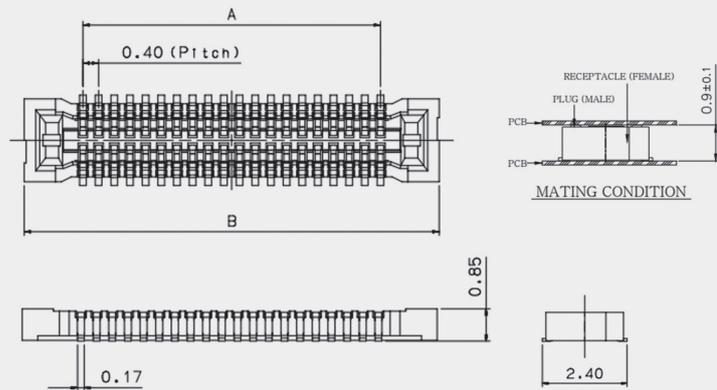
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TYPE : RECEPTACLE (FEMALE)

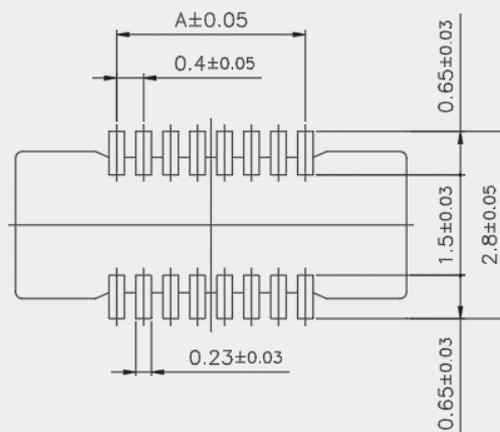
Product Drawing



Female (Receptacle)



Recommended PCB , Metal Mask Layout



【 APPLICABLE P.C.B DIMENSION 】

Mating Size / Unit : (mm)

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

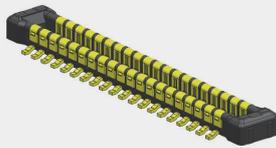
Board To Board Connector



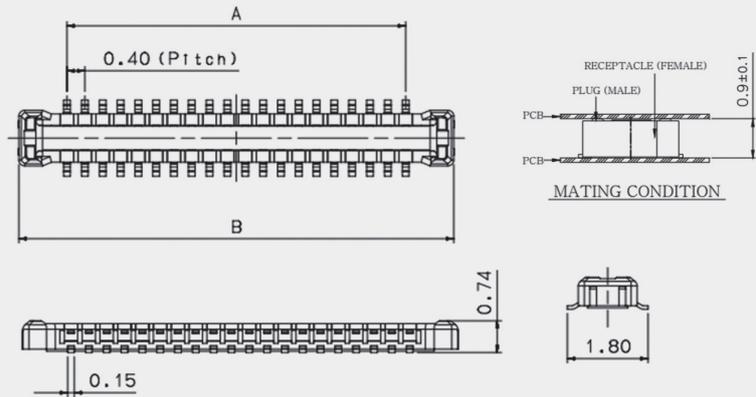
Applications | Smart Phone, Smart Watch, Tablet PC, Mobile Devices, Wearable Devices

TYPE : PLUG (MALE)

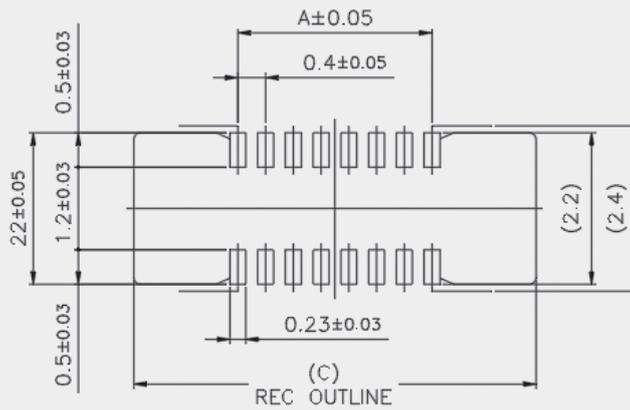
Product Drawing



Male (Plug)



Recommended PCB , Metal Mask Layout



【 APPLICABLE P.C.B DIMENSION 】

Mating Size / Unit : (mm)

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