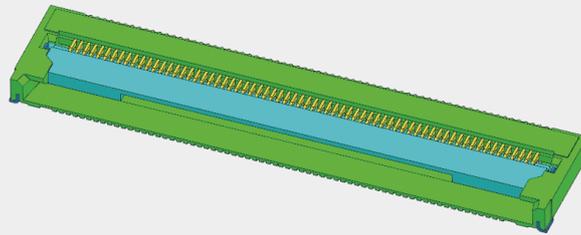


FPC/FFC Connectors (Display)

HF

Applications | Mobile device, Display, PC



- ▶ Space-saving design
- ▶ Applicable for FPC/FFC thickness is $0.30\pm 0.05\text{mm}$

Code & Specification

Mating Size / Unit : (mm)

| Product Code | Pitch (mm) | No. of Contacts | Width (mm) | Height (mm) | Length | Remark |
|------------------|------------|-----------------|------------|-------------|--------|--------|
| PF050-O96B-C20-H | 0.50 | 96 | 8.40 | 2.20 | 52.90 | - |

| Rated Current | Contact Resistance | Withstanding Voltage | Temperature Range |
|---------------|--------------------|----------------------|-------------------|
| 0.5A/Pin | 30mΩ (Max.) | AC 250V | -45°C ~ 85°C |

FPC/FFC Connectors (Display)



Applications | Mobile device, Display, PC

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 (With packing) |
| | Rated voltage | 50V r.m.s | Operating humidity range | 85%RH 2 | Storage humidity range | 65%RH |

1) Including terminal temperature rise.

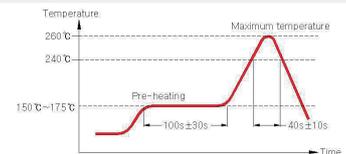
2) Storage area is to be free of corrosive gases and dew formation.

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. Durability | 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 resistance | No damage or mechanical defect No interruption over 1μ sec. | Peak acceleration : 490m/s ² 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 Humidity : 90% ~ 95% Duration : 96hr |
| 10. Temperature cycle | 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

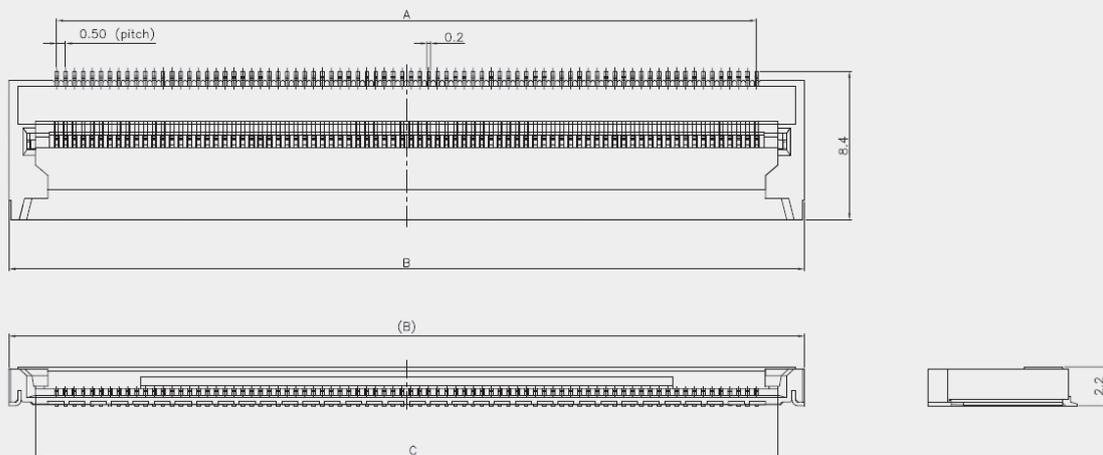
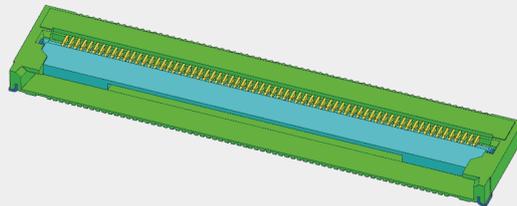
| Part | Materials | Finish | UL Regulation |
|--------------------|-----------------|----------------|---------------|
| Base | LCP | Natural | UL94V-0 |
| Actuator | PA | Black | UL94V-0 |
| Contact Terminal A | Phosphor Bronze | Au over Nickel | - |
| Fitting Nail | Phosphor Bronze | Sn over Nickel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

FPC/FFC Connectors (Display)



Applications | Mobile device, Display, PC

Product Drawing



Mating Size / Unit : (mm)

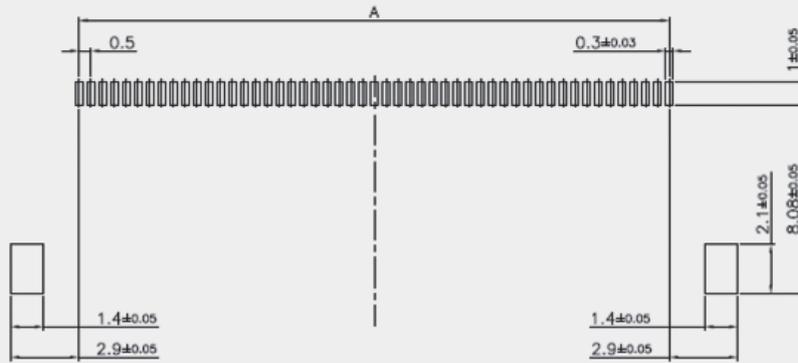
| Product No. | No. of Contacts | A | B | C |
|------------------|-----------------|-------|-------|-------|
| PF050-OxxB-C20-H | 96 | 47.50 | 52.90 | 49.90 |

FPC/FFC Connectors (Display)

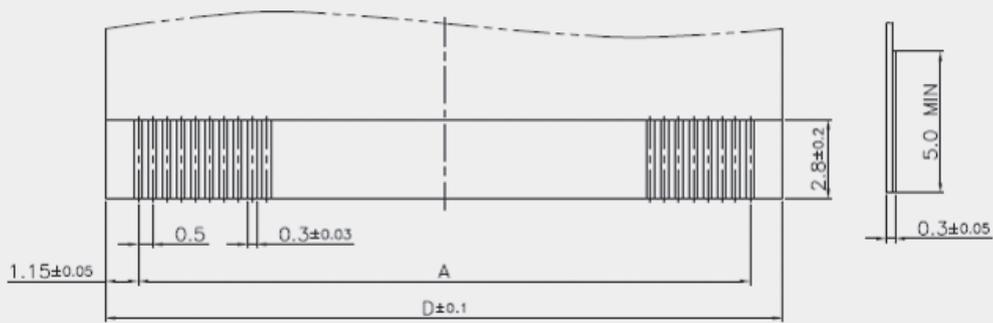


Applications | Mobile device, Display, PC

Recommended PCB , Metal Mask Layout



Recommended FFC/FPC Dimensions



Mating Size / Unit : (mm)

| Product No. | No. of Contacts | A | B | B | C |
|------------------|-----------------|-------|-------|-------|-------|
| PF050-OxxB-C20-H | 96 | 47.50 | 52.90 | 49.90 | 49.80 |