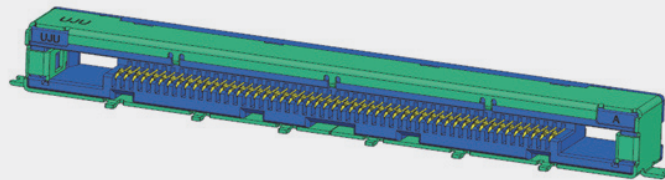


FPC/FFC Connectors (Display)

LCD 0.5 Pitch 3.85H

Applications | Mobile device, Display, PC



- ▶ Low Voltage Differential Signaling(LVDS) connector
- ▶ Terminal deformation prevention structure
- ▶ Reverse insertion prevention structure
- ▶ Damage prevention structure by a cover

Code & Specification

Mating Size / Unit : (mm)

| Product Code | Pitch (mm) | No. of Contacts | Width (mm) | Height (mm) | Length | Remark |
|------------------|------------|-----------------|------------|-------------|--------|--------|
| IS050-C41B-C39-S | 0.50 | 41 | 3.75 | 3.85 | 32.85 | - |
| IS050-C51B-C39-S | 0.50 | 51 | 3.75 | 3.85 | 37.85 | - |

| Current Rating | Contact Resistance | Insulation Resistance | Withstanding Voltage | Temperature Range |
|-------------------------------|--------------------|-----------------------|----------------------|-------------------|
| AWG #30, #32, #36 0.8A/Pin | 30mΩ [Max.] | 100MΩ [Min.] | AC 250V | -25°C ~ 85°C |

FPC/FFC Connectors (Display)

LCD 0.5 Pitch 3.85H

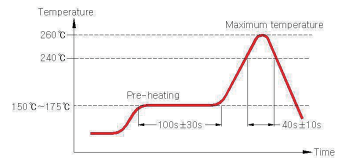
Applications | Mobile device, Display, PC

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 | 30mΩ Max. / contact | - Test current : 10mA. - 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) |
| 8. Shock resistance | Discontinuity : 1.0 microsec. MAX. | - Acceleration : 50G (490 ^{m/s²}) - Duration : 11ms - Number of shocks : 3 both axial directions, 3 times each, 18 times in total |
| 9. Humidity | - Contact resistance : 80mΩ Max - Insulation resistance : 50MΩ Min | Temperature : 40°C±2°C Humidity : 90% RH to 95% RH 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 | - 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

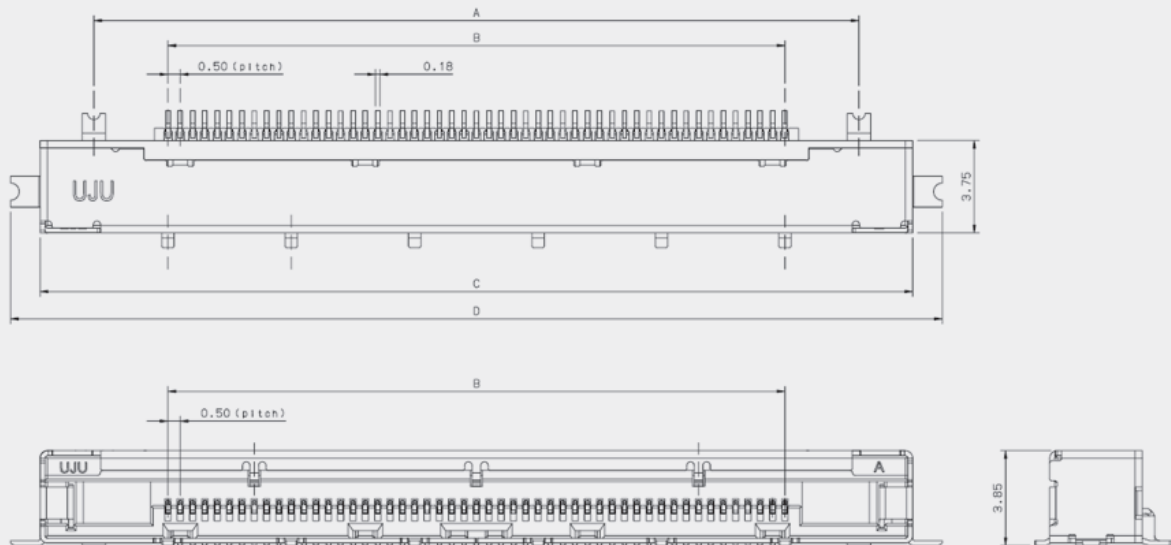
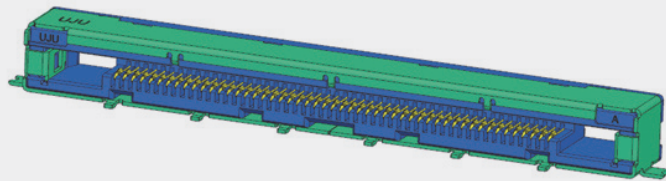
| Part | Materials | Finish | UL Regulation |
|----------|-----------------|---------------|---------------|
| Base | LCP | Black | UL94V-0 |
| Terminal | Phosphor Bronze | Au, Ni plated | - |
| Cover | Stainless Steel | Sn, Ni plated | - |

FPC/FFC Connectors (Display)

LCD 0.5 Pitch 3.85H

Applications | Mobile device, Display, PC

Product Drawing



Mating Size / Unit : (mm)

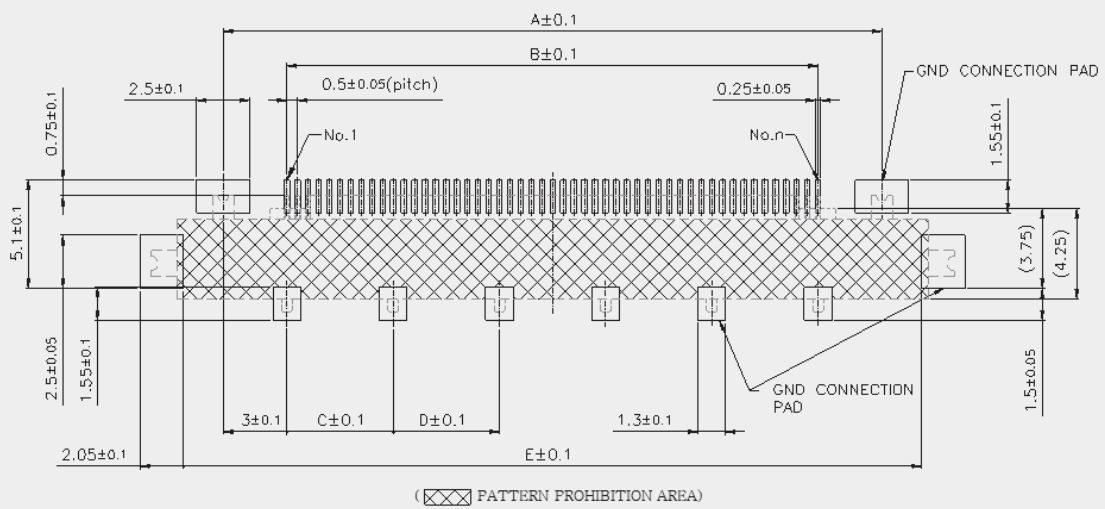
| Product No. | No. of Contacts | A | B | C | D |
|------------------|-----------------|-------|-------|-------|-------|
| IS050-C41B-C39-S | 41 | 26.00 | 20.00 | 30.35 | 32.85 |
| IS050-C51B-C39-S | 51 | 31.00 | 25.00 | 35.35 | 37.85 |

FPC/FFC Connectors (Display)

LCD 0.5 Pitch 3.85H

Applications | Mobile device, Display, PC

Recommended PCB, Metal Mask Layout



Mating Size / Unit : (mm)

| Product No. | No. of Contacts | A | B | C | D |
|------------------|-----------------|-------|-------|-------|-------|
| IS050-C41B-C39-S | 41 | 26.20 | 52.40 | 56.00 | 57.40 |
| IS050-C51B-C39-S | 51 | 26.20 | 52.40 | 56.00 | 57.40 |