

# **FA10 Series**Single Action Mating FPC Connector

**Connector Training Module** 



## **Application Examples**

- Smartphones
  - Tablets
  - Laptops
- Other Mobile Devices





#### **FA10 Series Features**

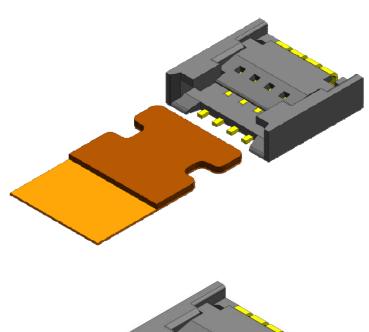
- Space-saving FPC connector
- Top and bottom surface connection type, LIF\* structure
- FPC guides prevent misalignment by holding the FPC in place until the actuator locks
- Easy, one-action mating; No actuator or slider operation required during insertion and removal
- Tapered guides for easy FPC insertion
- Board pattern traces are possible under the connector (excluding terminal areas)
- 2-point FPC lock structure
- Pb-free, halogen-free compliant
- Ni barrier prevents solder wicking

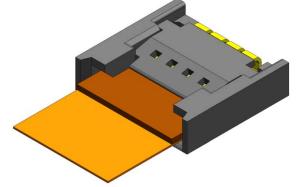




# **General Specifications**

| No. of Contacts                 | 4, 5, 6, (8),10             |
|---------------------------------|-----------------------------|
| Pitch                           | 0.5mm, one row alignment    |
| Height                          | 0.9mm                       |
| Depth                           | 3.2mm                       |
| Applicable FPC Thickness        | 0.2mm±0.03mm                |
| FPC Retention Force             | 2N (Min.) (Initial)         |
| Contact resistance              | 100mΩ max (initial)         |
| Dielectric Withstanding Voltage | 250 ACVr.m.s (for 1 minute) |
| Operating Temperature Range     | -40 to +85°C                |
| Rated Current                   | 0.5A per pin                |
| Rated Voltage                   | 50V(A.C./D.C.) per pin      |
| Mating Durability               | 20 cycles                   |
| Coplanarity                     | 0.08mm max.                 |



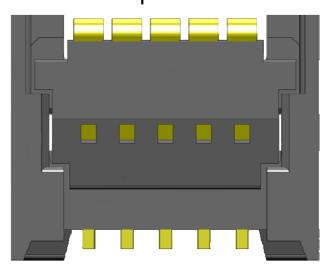


\*( ): Development scheduled

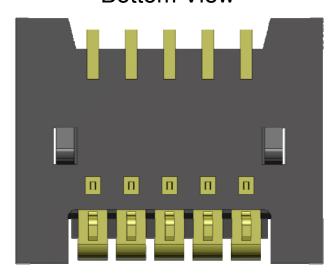


## **FA10 Connector Layout**

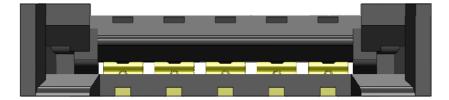
Top View



**Bottom View** 



Front View



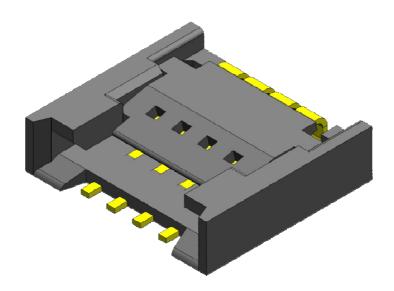
**Back View** 





### **Material and Finishes**

| Component | Material / Finish                             |
|-----------|---|
| Housing   | Heat-resistant resin (black, halogen-free)    |
| Contact   | Cu alloy, Au plating over Ni<br>Au 0.1µm min. |

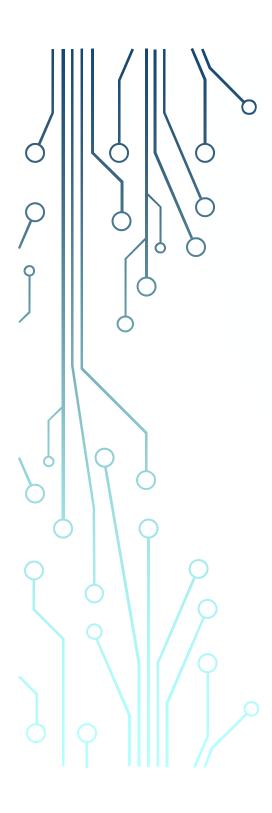




### **Summary**

- 0.5mm pitch
- Multiple pin counts: 4, 5, 6, (8), 10
- Top and bottom surface connection type, LIF\* structure
- Tapered FPC guides prevent misalignment
- Easy, one-action mating
- 2-point FPC lock structure





#### **Technology to Inspire Innovation**



www.JAE.com