

Technology to Inspire Innovation

# ***Preferred Connector Products***

# **JAE**



***JAE Electronics, Inc.***

***For Additional Information Visit [www.jae-connector.com](http://www.jae-connector.com)***

**J**apan Aviation Electronics Industry, Ltd. (JAE) is an international manufacturer and supplier of electronic components and systems. For over four decades, JAE has provided the electronics industry with solutions to complex design requirements. Since its founding, the Company has strived to contribute to society through market-driven, technology-based global business operations under the philosophy: "Technology to Inspire Innovation."

With worldwide and world-class manufacturing certified to ISO 9001 and QS 9000, JAE has made the commitment to meet the global requirements of our customer. In addition to a network of state of the art manufacturing facilities, JAE has technical service offices located around the world, staffed with experts in connector design and application.

This catalog contains a select overview of JAE Connector Products. For in-depth information on our complete product line, and information on new developments, visit JAE's online catalog at [www.jae-connector.com](http://www.jae-connector.com).

Innovative design, quality oriented manufacturing, commitment to our customers and sensitivity to the environment assures JAE's leadership position in the 21<sup>st</sup> century.

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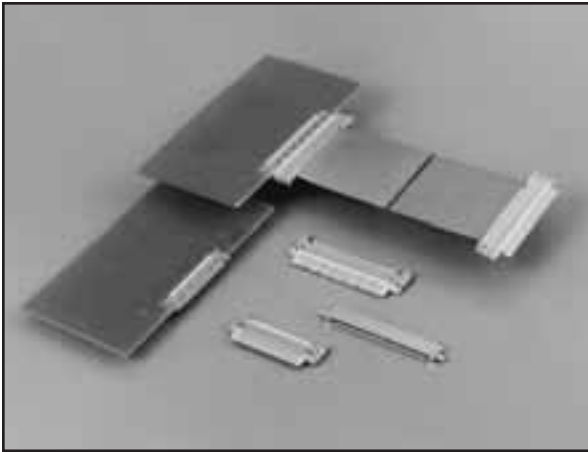
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- All JAE connector products shown in this catalog are lead free.
- We reserve the right to modify designs in order to improve quality, keep pace with technological advancements or meet particular requirements in production.
- Products shown in this catalog are made for the applications specified. However, if the above-mentioned products are to be used in aerospace devices, marine cable-connection devices, atomic power control systems, medical equipment for life-support systems, or any other specific application requiring extremely high reliability, please contact JAE for further information. Recommended Applications: Computers, Office Machines, Measuring Devices, Telecommunications Devices (Terminals, Mobile Devices) AV Devices, Household Applications, FA Devices, etc.
- Refer to end of catalog for alphabetical index of products.

# FI-X SERIES CONNECTORS

## 1.00mm (.039") Contact Spacing, Connector for PCB-to-Cable



### FEATURES

- Compatible with high-speed differential transmission and high-level impedance matching (90 to 100 ohms)
- Greatly improved ground condition which is directly related to EMI characteristics
- Bottom type structure provides 1.5mm (.059") connector height and 1mm (.039") height above the PCB
- 1mm (.039") contact pitch with impedance matching
- FPC provides stable grounding to the PCB
- Compatible with a variety of cables such as thin wire coaxial cables and flex circuitry
- Friction lock housing enables secure connections

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The FI-X Series connectors are designed for thin LCD interface applications, and are compatible with high-speed differential transmissions. They are ideal for use in compact notebook PCs, and other applications where size and weight are critical considerations.

### GENERAL SPECIFICATIONS

Number of Contacts	14, 20, 30 14 (specifically designed for differential transmission/ 7 pairs)
Contact Spacing	1.0mm (.039")
Applicable FPC	0.14mm $\pm$ 0.03mm (.005" $\pm$ .001")
Current Rating	AC/DC 1 Amp per contact
Dielectric Withstanding Voltage	500 VAC r.m.s. (for one minute)
Insulation Resistance	100 megohms min.
Contact Resistance	40 milliohms max.
Operating Temperature	-40°C to +80°C
Voltage Rating	AC/DC 200V

### MATERIALS AND FINISHES

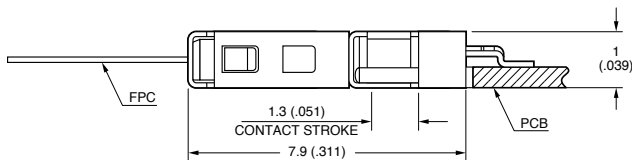
#### FI-XB\*\*SL-HF10 (Board Connector)

Ground Plate	Copper Alloy / Tin plating
Insulator	Glass filled 4-6 Nylon (UL94V-0, Beige)
Shell	Copper Alloy/Tin plating
Contact	Copper Alloy/Gold plating over Nickel Terminal Area: Tin'Lead over Nickel

#### FI-X\*\*M (Cable Connector)

Ground Plate	Copper Alloy / Tin plating
Insulator	Glass filled 4-6 Nylon (UL94V-0, Beige)
Shell	Copper Alloy/Tin plating
Slider	Thermal Plasticity plating
Contact	Copper Alloy/Gold plating over Nickel Mating FPC Area: Tin'Lead over Nickel

Connector Profile (Ref.)



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# FI-X SERIES CONNECTORS

## 1.00mm (.039") Contact Spacing, Connector for PCB-to-Cable

### MATERIALS AND FINISHES, Cont.

#### FI-X\*\*M(R) (Cable Connector, FPC Relay Type)

Ground Plate	Copper Alloy / Tin plating
Insulator	Glass filled 4-6 Nylon (UL94V-0, Beige)
Shell	Copper Alloy/Tin plating
Slider	Thermal Plasticity plating
Contact	Copper Alloy: Contact Portion: Gold plating over Nickel FPC Contact Portion: Tin-Lead plating over Nickel

#### FI-XC3-1-15000 (Socket Contacts)

Contact	Copper Alloy: Contact Portion: Gold plating over Nickel Cable Crimping Portion: Tin plating
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#### FI-X\*\*H (Cable, Crimp Housing)

Description	Materials/Finishes
Housing	Glass filled 4-6 Nylon
Shell	Copper Alloy/Tin plating (D7: Gold plating over Nickel on ground)

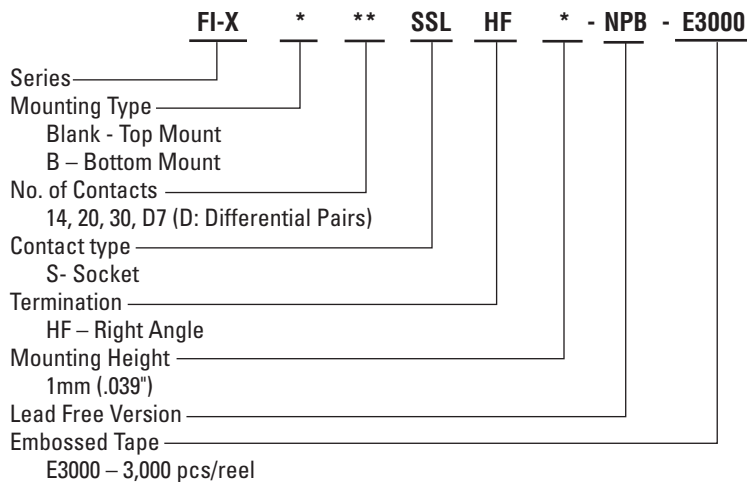
#### FI-X\*\*C (Cable Connector)

Ground Plate	Copper Alloy / Tin plating
Insulator	Glass filled 4-6 Nylon
Slider	Thermal Plasticity plating
Contact	Copper Alloy: Contact Area: Gold (0.1µm min.) over Nickel Terminal Area: Tin-Lead over Nickel

### TOOLING

Description	Part Number
Hand Crimp Tool	CT150-4C-FIX
Press	CP215-4B
Applicator	350-FI-2B

### ORDERING INFORMATION



Technology to Inspire Innovation

# JAE

***“Building Technologies  
to Connect Your World”***



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