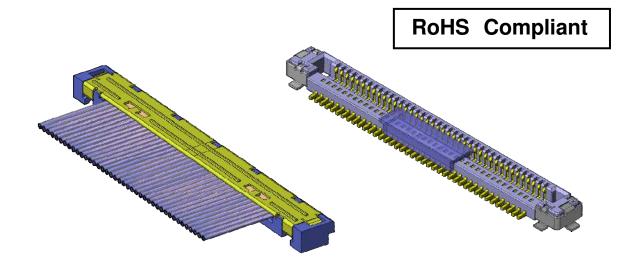




Thin Wire Coaxial Connector for Small Portable Devices CONNECTOR

MB-0143-3 October 2008

# **FI-J Series**



The FI-J Series is a thin-wire coaxial connector compatible with 42 and 44 AWG wires, and it is ideally suited for compact devices. The FI-J achieves remarkable space saving on the board and is small enough to pass through a narrow hinge after the harness is assembled.

### Features

- ■Plug side can pass through 3.6mm dia. hinge after harness assembly. (40 position, 42 AWG)
- ■2.5mm depth, 21.7mm width (for 40 position), with 1.58mm height when mated
- ■Stable connection ensured by 0.4mm effective contact length
- Highly reliable structure of supporting the contact points with each contact
- ■Enhanced connection stability with gold-plated ground contact points on plug and receptacle
- ■Mis-mating prevention structure
- ■Compatible with 42 and 44 AWG wires. (Proven harness assembly compliance)
- Receptacle side: Available on embossed tape for automatic mounting
- Receptacle side: Solder migration prevention structure with Ni barrier

# **General Specifications**

■Pitch: 0.4mm

■Operating Temperature:

-40 Deg. C to +85 Deg. C

■Contact Resistance: 40m ohm max.

■Life Time: 30 times

■No. of contacts: 20, 25, 30, 35, 40 pos. ■Rated Current: AC, DC each 0.3A per pos.

■Rated Voltage: AC, DC each 50V per pos.

■Insulation Resistance: 100M ohm min.

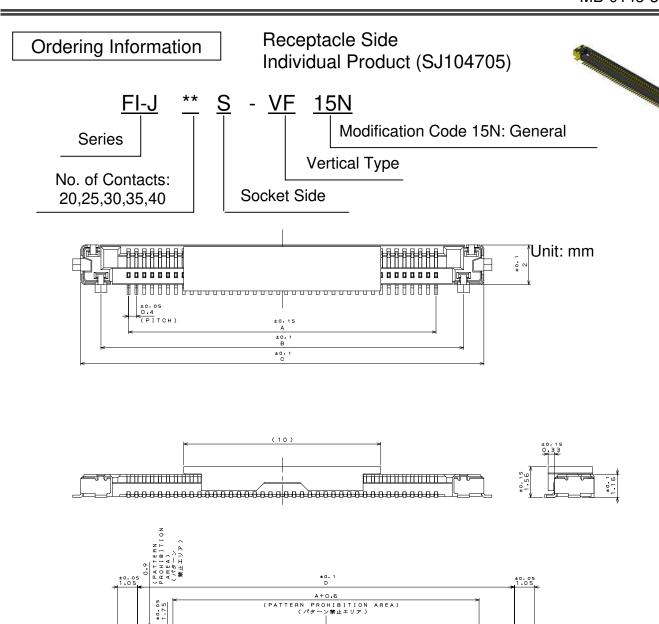
■ Dielectric Withstanding Voltage:

AC 250Vr. m.s per minute

■Applicable Cable: 42 to 44 AWG

## Materials and Finishes

Component	Material / Finish			
Receptacle(FI-J**S-VF15N)				
Contact	Copper alloy / Contact portion and terminal portion:  Au flash plating over Ni			
Hold down	Copper alloy / Contact portion and terminal portion:  Au flash plating over Ni			
	Au liash plating over Ni			
Insulator	Heat resistant plastic UL94V-0			
Adsorption Insulator	Heat resistant plastic UL94V-0			
Plug(FI-J**C5 / FI-J**C2-SH-D)				
Contact	Copper alloy / Contact portion and terminal portion:  Au flash plating over Ni			
Insulator	Heat resistant plastic UL94V-0			
Shell	Stainless steel / Au plating over Ni			



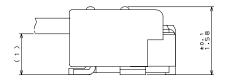
Recommended dimension of board

±0.1

### Dimension Chart

±0.05

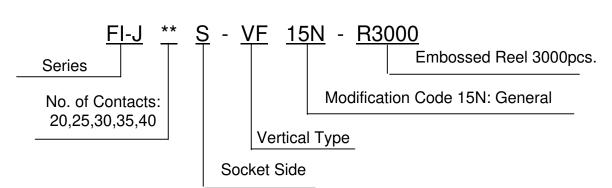
<u>=</u>					
No.OF CONTACTS	20	2 5	3 0	3 5	4 0
А	7.6	9.6	11.6	13.6	15.6
В	10.4	12.4	14.4	16.4	18.4
С	12.46	14.46	16.46	18.46	20.46
D	11.95	13.95	15.95	17.95	19.95
Е	9.4	11.4	13.4	15.4	17.4



<u>Drawing when mated</u> (for reference)

# Ordering Information

# Receptacle Side Embossed Product (SJ104708)



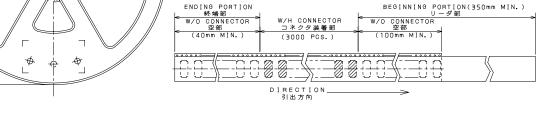
# DIRECTION SI出し方向 ENDING PORTION W/O CONNECTOR 空幣 (40mm MIN.)

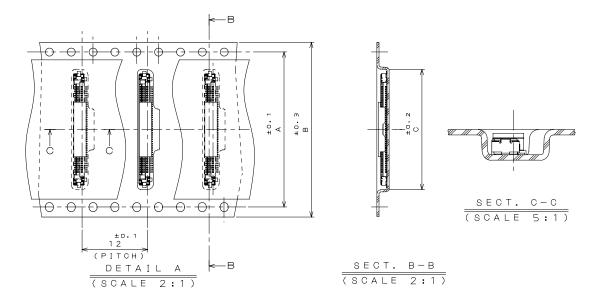
### Unit: mm

### **Dimension chart**

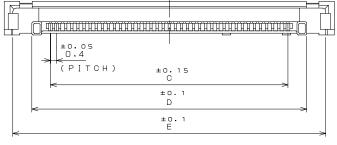
No.OF CONTACTS	20	25	30	35	40
А		28.4	28.4	28.4	28.4
В	24	32	32	32	32
С	14	16	18	20	22

<sup>\*</sup> One lane for 20 pos. type is carrier.



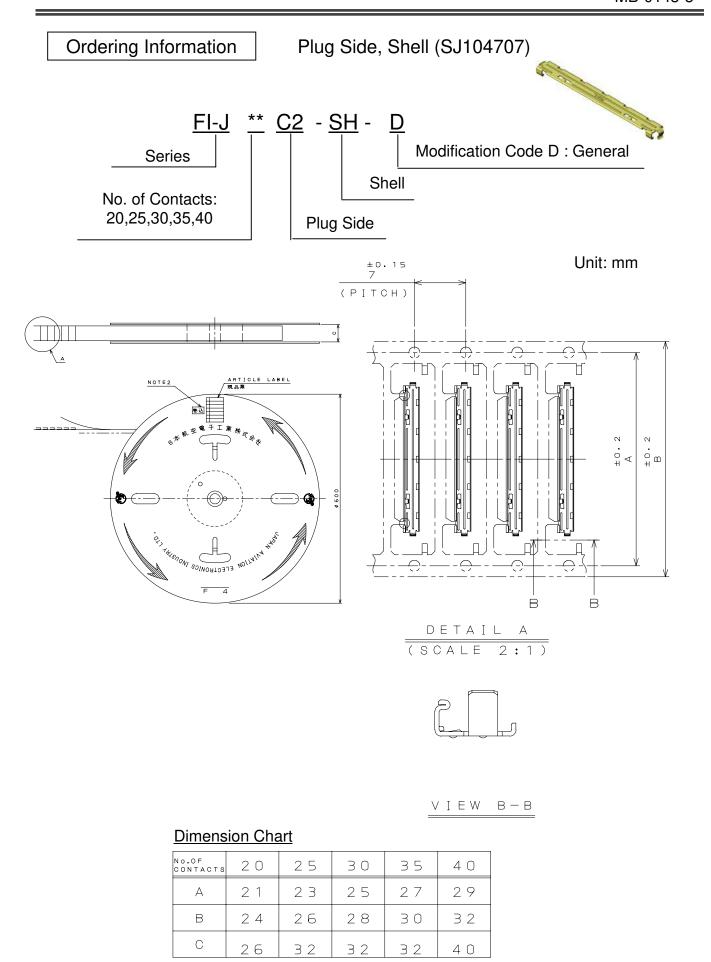


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## **Dimension Chart**

No.OF CONTACTS	20	25	3 0	3 5	4 0
А	7.6	9.6	11.6	13.6	15.6
В	13.7	15.7	17.7	19.7	21.7
С	7.6	9.6	11.6	13.6	15.6
D	10.06	12.06	14.06	16.06	18.06
Е	12.56	14.56	16.56	18.56	20.56



### **Related Documents**

- Product Specification Chart (JACS): JACS-10217
- Harness Assembly Handling Instructions (JAHL):
   JAHL-10217-04
- Connector Handling Instructions (JAHL):
   JAHL-10217-20

• Connector Insertion /Extraction Tools:

Drawing No.: SJ713182-00

Part Number: SC-FIJ-1

Handling Instructions: T713182

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Product Marketing Division Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539 Phone: +81-3-3780-2787 FAX: +81-3-3780-2946 Motice: Products shown in this leaflet are made for the applications listed below. 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, telecommunication devices (terminals, mobile

telecommunication devices (terminals, mobile devices), AV devices, household applications, FA devices, etc.