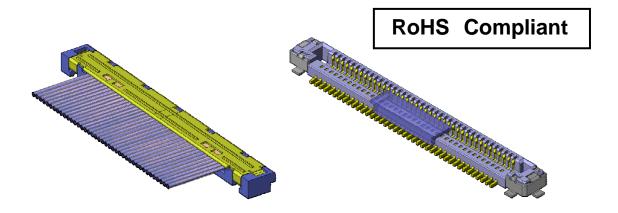




Thin Wire Coaxial Connector for Small Portable Devices CONNECTOR

MB-0143-2 July 2006

FI-J Series



Outline

Thin wire coaxial connector compatible to AWG #42, 44 cables for small compact devices has been developed. Space saving on board and small enough to passed through hinge after harness assembly.

Features

- ■The smallest board mounting space in the industry (compared with other 0.4mm pitch product) with 2.5mm depth, 21.7mm pitch direction (for 40 pins). 1.58mm height.
- ■Ensures 0.4mm effective contact length with stable connection.
- ■Highly reliable structure by supporting the contact points with contacts
- ■Ensures low contact resistance with Au plated ground contact points between plug and receptacle with stable connection.
- ■Mis-mating prevention structure
- ■Compatible with AWG #42 and #44 cables
- ■Receptacle side: Available on embossed tape for automatic mounting and ensures high mounting performance with adsorption cap.
- ■Receptacle side: Solder migration prevention structure with Ni barrier on receptacle plug.
- ■Plug side: Small hinge can be passed through after harness assembly.

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:

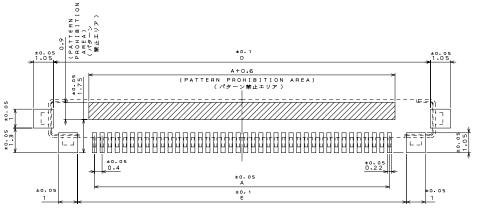
AC 250Vr. m.s per minute

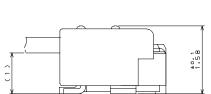
■Applicable cable: AWG#42 to 44

Materials and Finishes

Components	Materials/ Finishes			
Receptacle(FI-J**S-VF15N)				
Contact	Copper alloy/ Contact portion, Terminal portion: Au flash plating over Ni			
Hold down	Copper alloy/ Contact portion, Terminal portion: Au flash plating over Ni			
Insulator	Heat resistant plastic UL94V-0			
Adsorption insulator	orption insulator Heat resistant plastic UL94V-0			
Plug(FI-J**C3/ FI-J**C2-SH-D)				
Contact	Copper alloy/ Contact portion, Terminal portion: Au flash plating over Ni			
Insulator	Heat resistant plastic UL94V-0			
Shell	Stainless steel/ Au plating over Ni			

Ordering Information Receptacle side single item (SJ104705) FI-J ** S - VF 15N Series No. of Contacts: 20, 25,30,35,40 Socket side Unit: mm



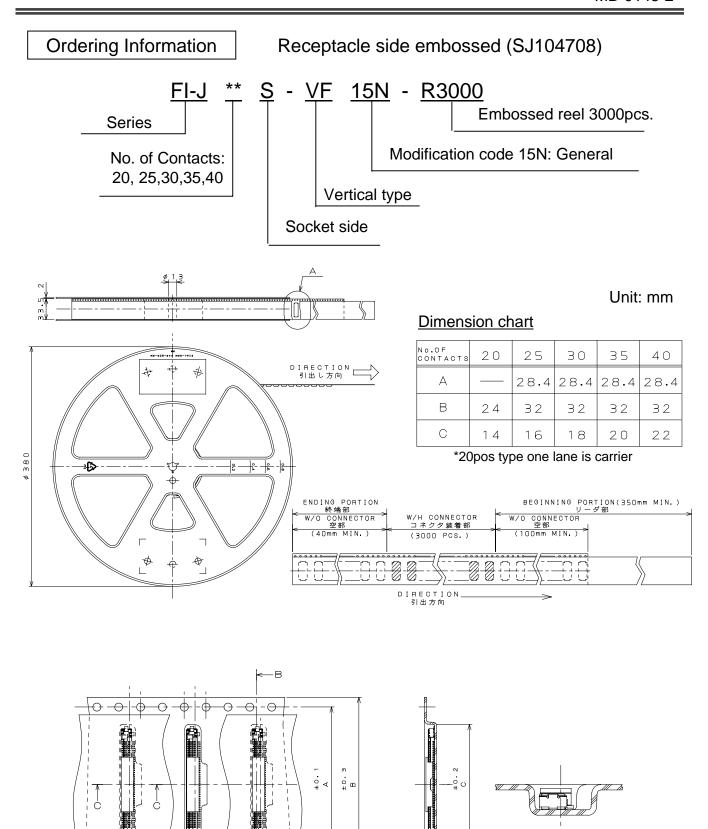


Recommended board dimensions

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

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	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



SECT.

(SCALE

SECT. B-B

(SCALE 2:1)

 $\mathsf{C}-\mathsf{C}$

⊢В

0+0-

Α

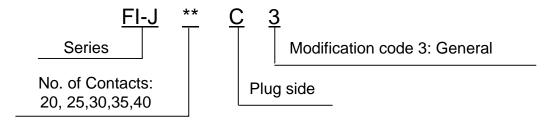
(PITCH)

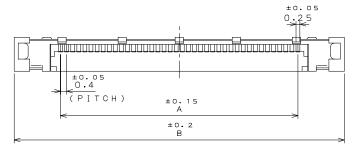
DETAIL

(SCALE 2:1)

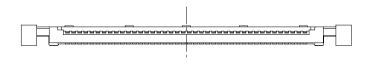
Ordering Information

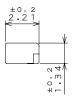
Plug side: Insulator (SJ104706)

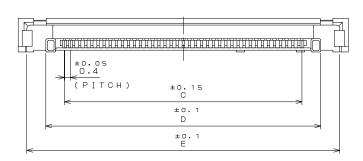




Unit: mm





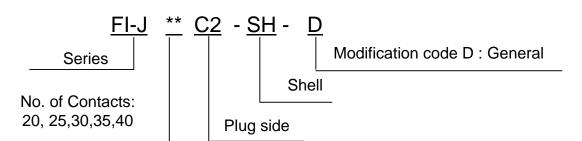


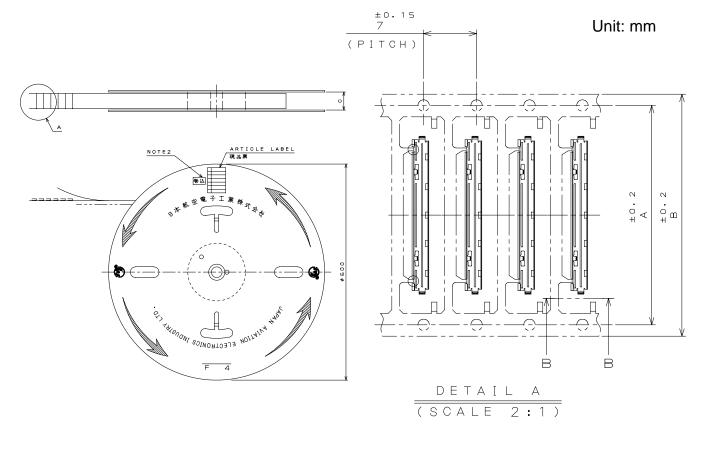
Dimension chart

No.OF CONTACTS	20	2 5	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

Ordering Information

Plug side: Shell (SJ104707)







VIEW B-B

Dimension chart

No.OF CONTACTS	2 0	2 5	3 0	3 5	4 0
А	2 1	2 3	2 5	2 7	2 9
В	2 4	26	28	3 0	3 2
С	26	3 2	3 2	3 2	4 0

Related Document

- 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 Part Number: SC-FIJ-1SJ

Handling Instructions: T713182

Japan Aviation Electronics Industry, Limited

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 devices), AV devices, household applications, FA devices, etc.