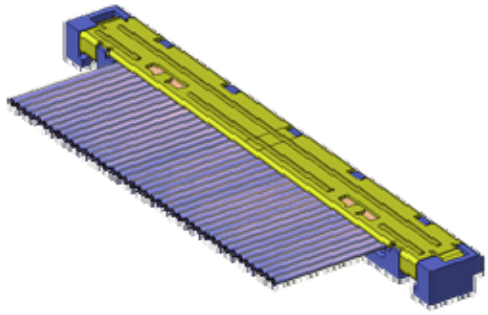
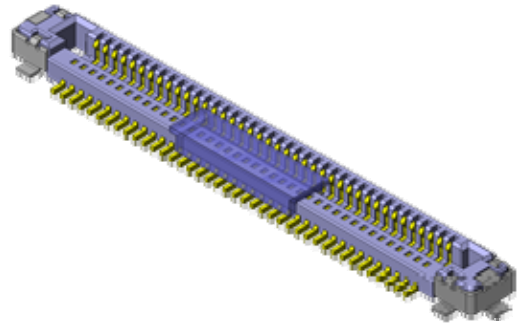
NEW

Thin Wire Coaxial Connector for Small Portable Devices

FI-J Series

CONNECTOR
MB-0143-1
November 2005





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

- No. of contacts : 20, 25, 30, 35, 40 pos.
- Pitch: 0.4mm
- Operating temperature: -40 Deg. C to +85 Deg. C
- Contact resistance: 40m ohm max.
- Life time: 30 times
- 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	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

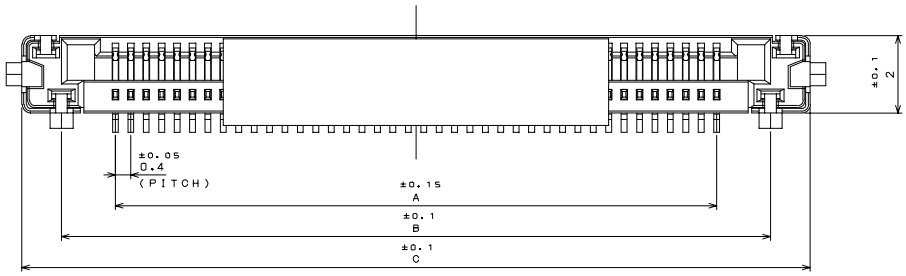
Ordering Information

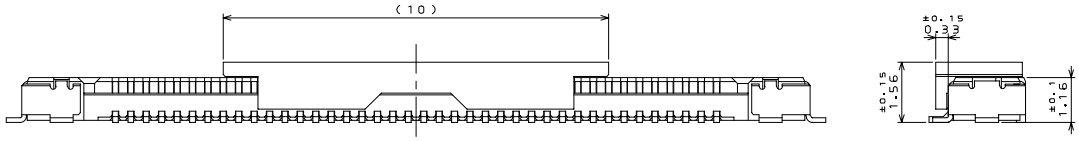
Receptacle side single item (SJ104705)

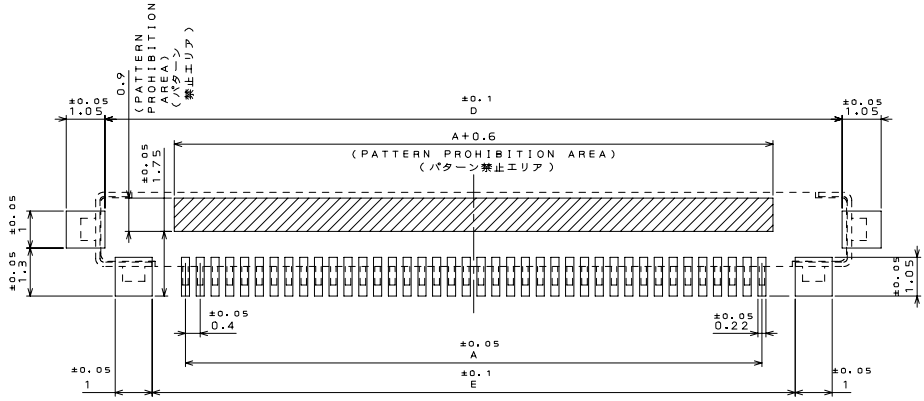
FI-J ** S - VF 15N

- FI-J: Series
- **: No. of Contacts: 20, 25,30,35,40
- S: Socket side
- VF: Vertical type
- 15N: Modification code 15N: General

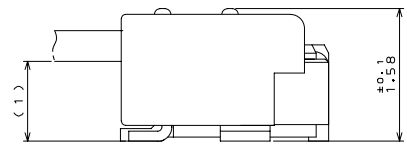
Unit: mm







Recommended board dimensions



Drawing when mated (for reference)

Dimension chart

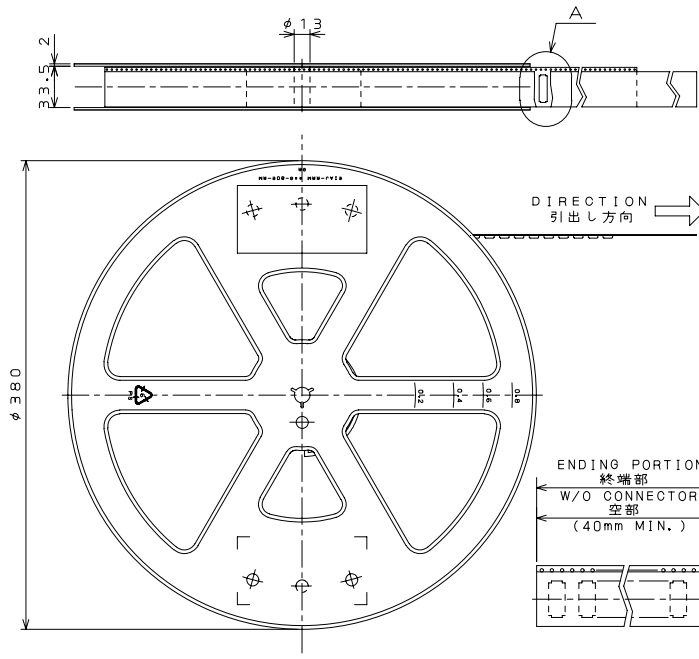
No.OF CONTACTS	20	25	30	35	40
A	7.6	9.6	11.6	13.6	15.6
B	10.4	12.4	14.4	16.4	18.4
C	12.46	14.46	16.46	18.46	20.46
D	11.95	13.95	15.95	17.95	19.95
E	9.4	11.4	13.4	15.4	17.4

Ordering Information

Receptacle side embossed (SJ104708)

FI-J ** S - VF 15N - R3000

- FI-J: Series
- **: No. of Contacts: 20, 25,30,35,40
- S: Socket side
- VF: Vertical type
- 15N: Modification code 15N: General
- R3000: Embossed reel 3000pcs.

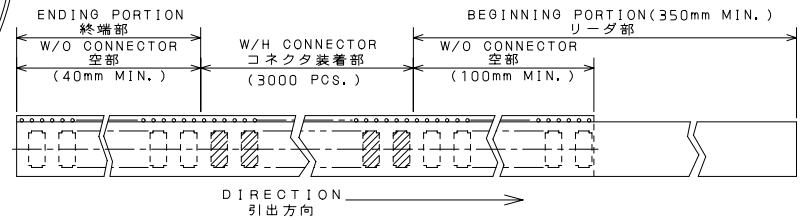


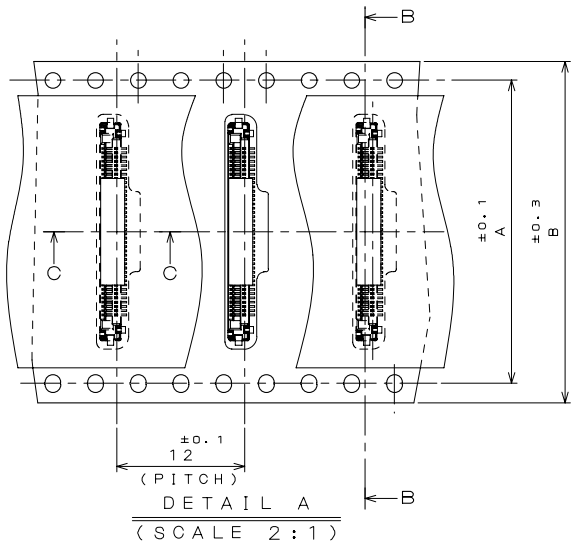
Unit: mm

Dimension chart

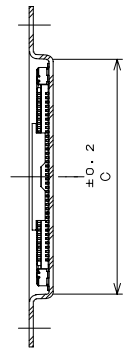
No.OF CONTACTS	20	25	30	35	40
A	——	28.4	28.4	28.4	28.4
B	24	32	32	32	32
C	14	16	18	20	22

*20pos type one lane is carrier

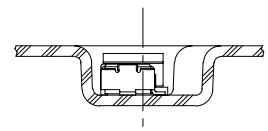




DETAIL A
(SCALE 2:1)



SECT. B-B
(SCALE 2:1)



SECT. C-C
(SCALE 5:1)

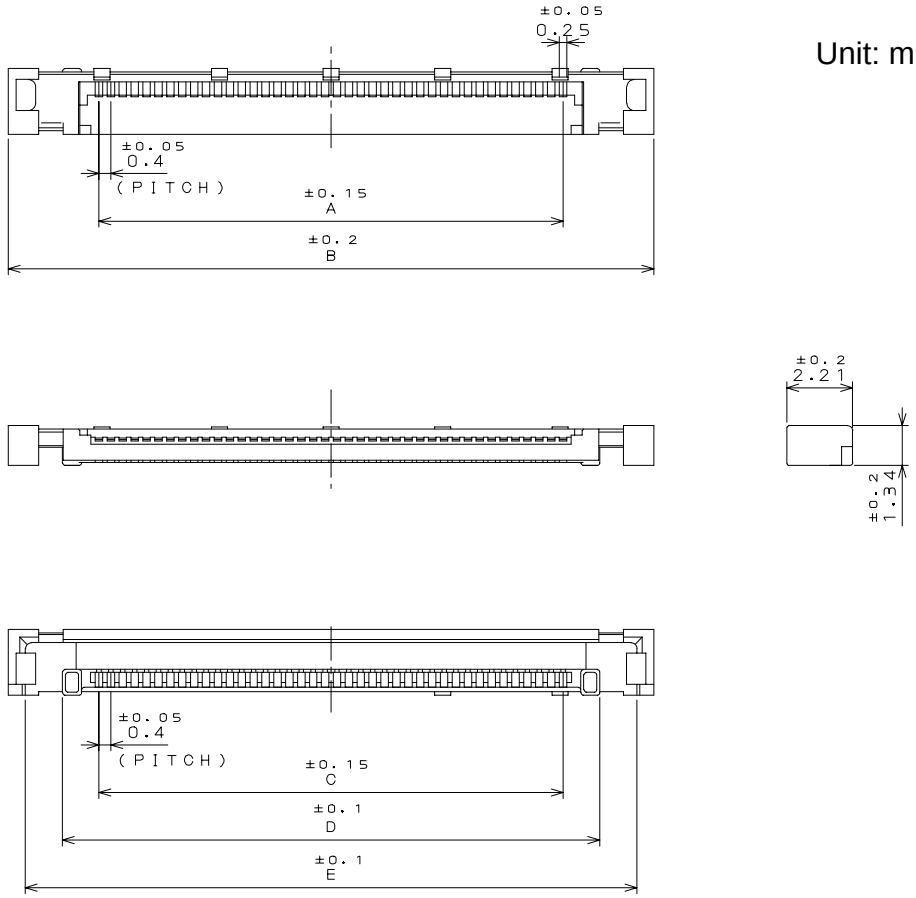
Ordering Information

Plug side: Insulator (SJ104706)

FI-J ** C 3

- FI-J: Series
- **: No. of Contacts: 20, 25,30,35,40
- C: Plug side
- 3: Modification code 3: General

Unit: mm



Dimension chart

No.OF CONTACTS	20	25	30	35	40
A	7.6	9.6	11.6	13.6	15.6
B	13.7	15.7	17.7	19.7	21.7
C	7.6	9.6	11.6	13.6	15.6
D	10.06	12.06	14.06	16.06	18.06
E	12.56	14.56	16.56	18.56	20.56

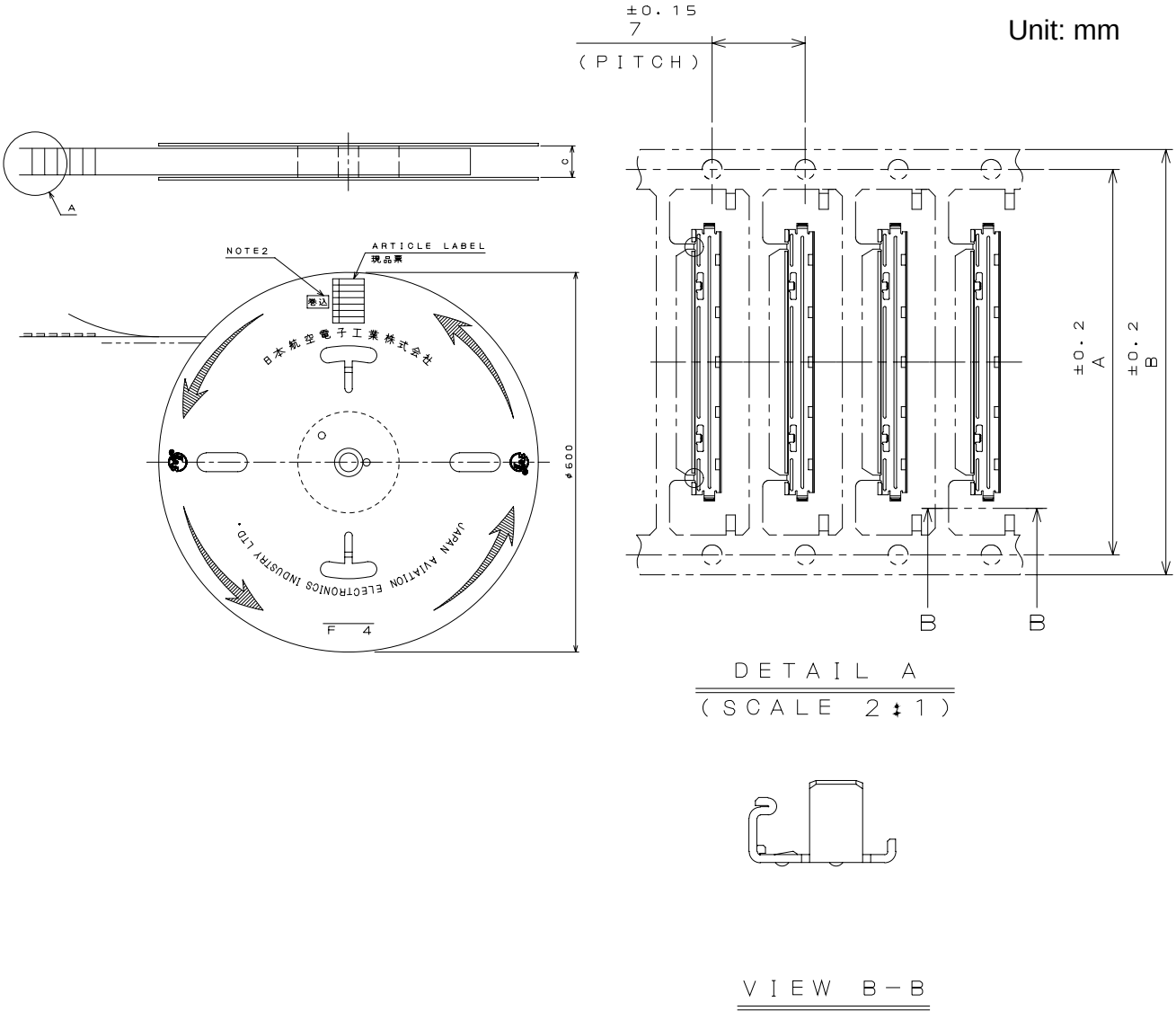
Ordering Information

Plug side: Shell (SJ104707)

FI-J ** C2 - SH - D

- FI-J: Series
- **: No. of Contacts: 20, 25,30,35,40
- C2: Plug side
- SH: Shell
- D: Modification code D : General

Unit: mm



Dimension chart

No.OF CONTACTS	20	25	30	35	40
A	21	23	25	27	29
B	24	26	28	30	32
C	26	32	32	32	40

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

Notice: 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.

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