

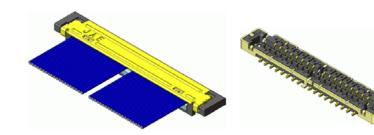


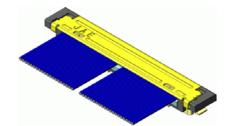
Fine-Coax Wire Connector for Small Portable Devices CONNECTOR

## **FI-JW Series**

MB-0181-2 October 2008

## **RoHS Compliant**





The FI-JW Series is a compact, low profile connector with a plug that can pass through a very small diameter hinge after harness assembly.

#### **Features**

- ■Plug side can pass through a 3.7mm dia. hinge after harness assembly (40 pos., 42 AWG)
- ■Mated dimensions of 3.2mm depth, 17.3mm width (40 pos.), 1.65mm height
- ■Stable connection by a secure 0.35 mm effective contact length.
- ■Enhanced connection stability with gold plated ground contact points on plug and receptacle
- ■Mis-mating prevention structure
- ■Enhanced noise resistance characteristic with 6 ground contact points between plug and receptacle
- ■Applicable wire: compatible with 42 and 44 AWG fine-coaxial wire
- ■Supports automated mounting with embossed tape for receptacle
- ■Solder migration prevention structure with Ni barrier on receptacle

## **General Specifications**

■No. of Contacts: 30, 34, 40, 50 pos.

■Pitch: 0.3mm

■Operating Temperature:

-40 Deg. C to +85 Deg. C

**■**Contact Resistance:

40m ohm max. (initial)

■Durability: 30 mating cycles

■Rated Current: AC, DC each 0.25A per pos.

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

■Insulation Resistance: 100M ohm min.

■Dielectric Withstanding Voltage:

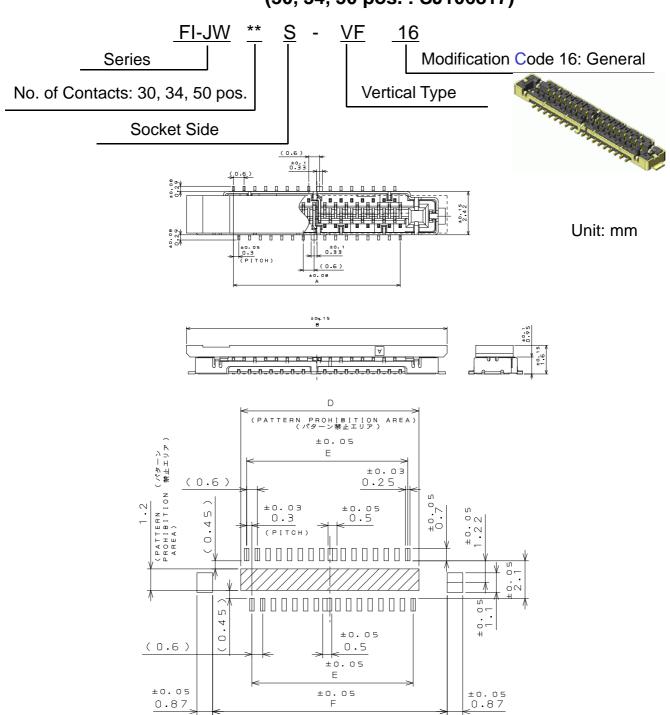
AC 100Vr. m.s per minute

■Applicable Wire: 42 to 44 AWG

#### Materials and Finishes

Component	Material / Finish			
Receptacle (FI-JW**S-VF16)				
Contact	Copper alloy / Contact area Au plating over Ni,			
	Terminal area Au flash plating over Ni			
Shell	Copper alloy / Contact area Au plating over Ni			
Insulator	Heat resistant plastic UL94V-0			
Adsorption Insulator	Heat resistant plastic UL94V-0			
Plug (FI-JW**C)				
Contact	Copper alloy / Contact area  Au plating over Ni,			
	Terminal area Au flash plating over Ni			
Insulator	Heat resistant plastic UL94V-0			
Plug / Base Ground Bar (FI-JW**C-BGB-**)				
Base Ground Bar	Stainless steel / Contact area Au plating over Ni			
	Terminal area Sn plating over Ni			
Plug / Cover Ground Bar (FI-JW**C-CGB-**)				
Cover Ground Bar	Copper alloy / Sn plating over Ni			
Plug / Cover Shell (FI-JW**C-SH1)				
Cover shell	Stainless steel / Au flash plating over Ni			

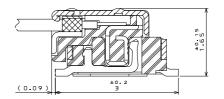
# Receptacle Side Individual Product (30, 34, 50 pos. : SJ106817)



Recommended dimensions of board

#### **Dimensions**

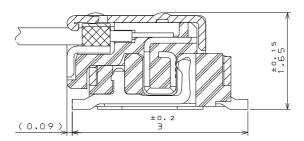
DIMENSIONS 寸法 NO. OF CONTACTS 芯数	А	В	С	D	Е	F
3 0	9.3	14.53	13.54	9.95	9	13.1
3 4	10.5	15.73	14.74	11.15	10.2	14.3
5 0	15.3	20.53	19.54	15.95	15	19.1



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

#### **Receptacle Side Individual Product Ordering Information** (40 pos.: SJ106319) FI-JW 40 S VF 16 Series Modification Code 16: General No. of Contacts: 40 pos THE THE PARTY OF T Vertical Type Socket Side (0.6) 0.33 Unit: mm (0.6) 12.3 17.5 #0. 15 (PATTERN PROHIBITION AREA) (パターン禁止エリア) (PATTERN (パターン PROHIBITION 禁止エリア AREA) ±0.05 1 2 (0.6)±0.05 -0.7 ±0.05 ±0.03 ±0.03 40-0.25 4.0 +0.05 ±0.05 0.5 0 ±0.05 (0.6) 12 ±0.05 ±0.05 0.87 16.1 0.87

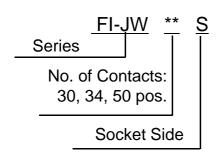
#### Recommended dimensions of board

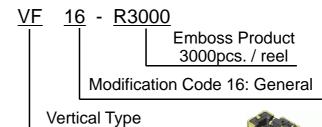


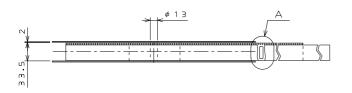
<u>Drawing when mated</u> (for reference)

## Receptacle Side Emboss Product

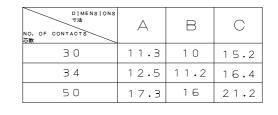
(30, 34, 50 pos. : SJ106818)

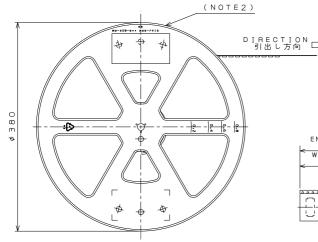


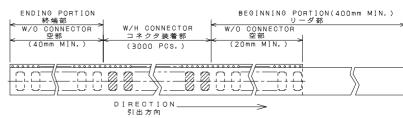


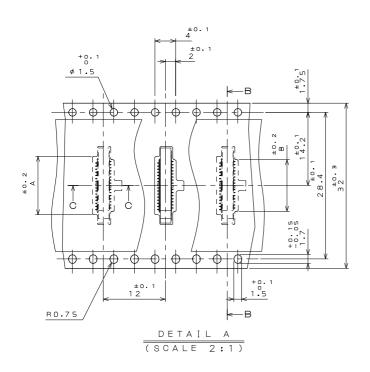


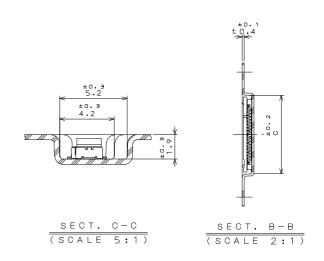
Unit: mm



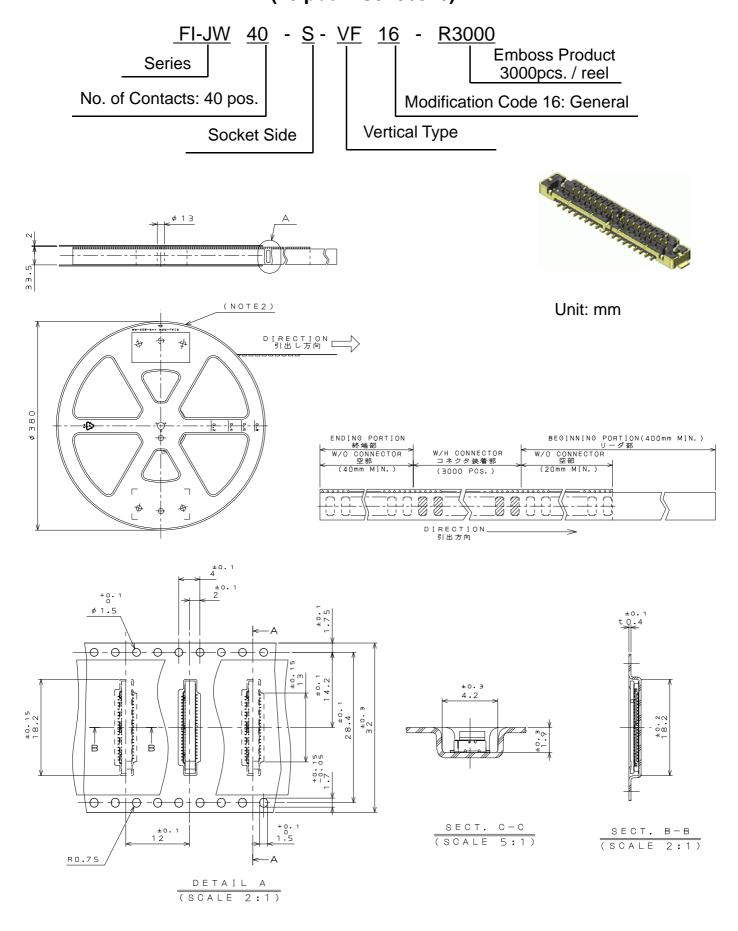




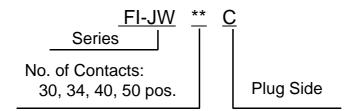


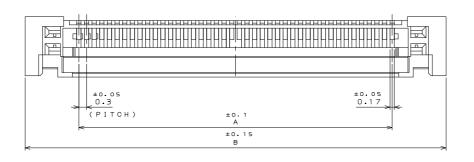


#### Receptacle Side Emboss Product (40 pos. : SJ106320)



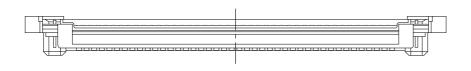
## Plug Side, Insulator (SJ106335)

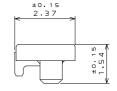


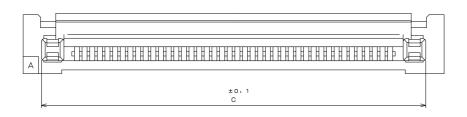


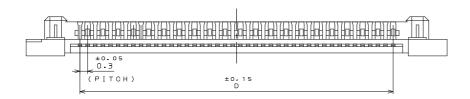


Unit: mm



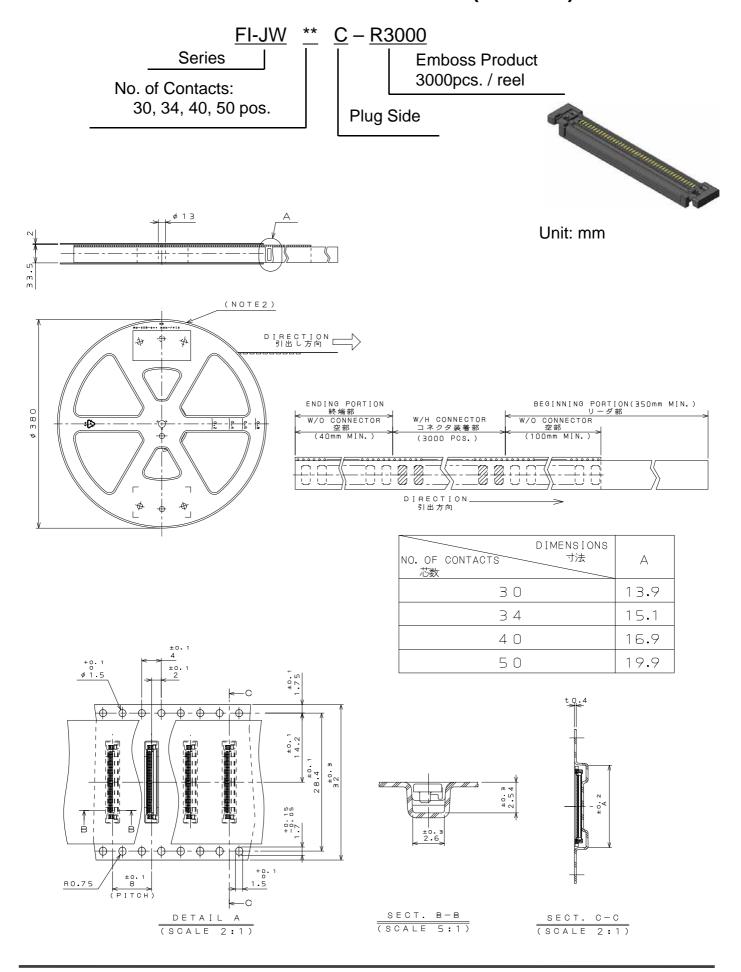




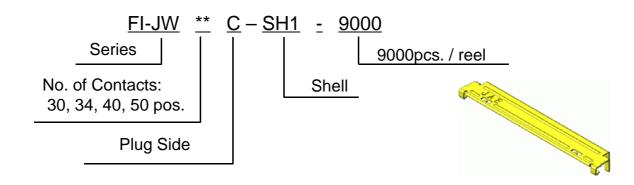


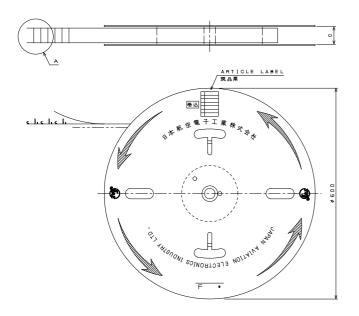
No.OF CONTACTS(N)	3 0	3 4	4 0	5 0
А	9.3	10.5	12.3	15.3
В	13.53	14.73	16.53	19.53
С	12.09	13.29	15.09	18.09
D	9.3	10.5	12.3	15.3

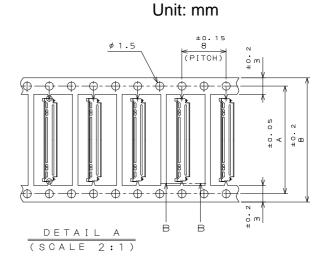
## Plug Side, Insulator Emboss Product (SJ10336)

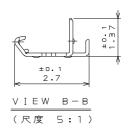


## Plug Side, Shell (SJ106357)



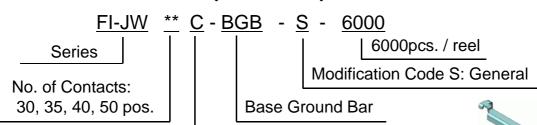




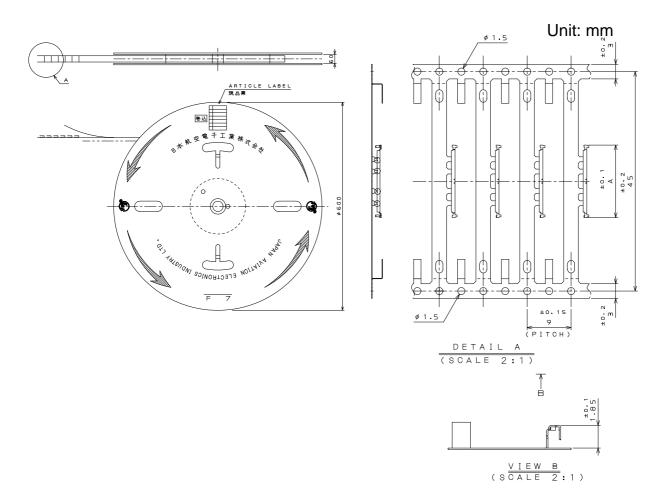


DIMENSIONS 寸法 NO. OF CONTACTS 寸法	А	В	0	TITLE 名称
3 0	16.5	19.5	26	F 1
3 4	17.7	20.7	26	F 1
4 0	19.5	22.5	3 2	F 3
5 0	22.5	25.5	3 2	F 3

## Plug Side, Base Ground Bar (SJ106358)

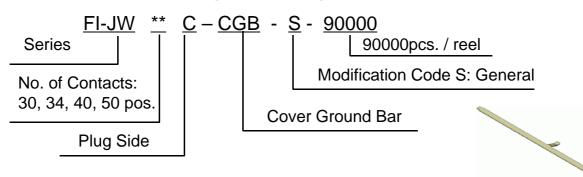


Plug Side

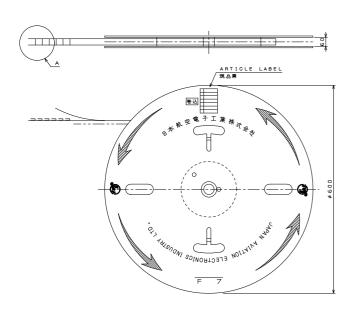


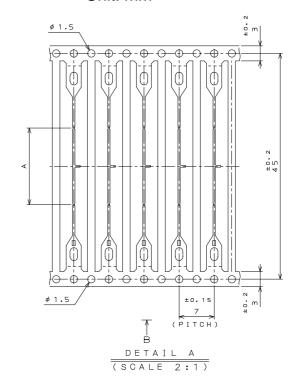
DIMENSIONS NO. OF CONTACTS 寸法 芯数	А
3 0	11.86
3 4	13.06
4 0	14.86
5 0	17.86

## Plug Side, Cover Ground Bar (SJ106360)



Unit: mm







DIMENSIONS NO. OF CONTACTS 寸法 芯数	А
3 0	12.26
3 4	13.46
4 0	15,26
5 0	18.26

#### **Related Documents**

-Specifications (JACS): JACS- 10345-5

-Harness Assembly Handling Instructions (JAHL): JAHL-10345-1

-Connector Handling Instructions (JAHL): JAHL-10345-10

-Connector Extraction Tool

SJ Drawing: SJ713199-00

P/N:SC-FIJW-2-K

Tool Handling Instruction: T713199



-Plug Shell Press-in Tool

P/N: WT-FIJW-2(B)-\*\*

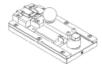
Tool Handling Instruction T714230



-Plug Shell Clamping Tool

P/N: WT-FIJW-5(B)-\*\*

Tool Handling Instruction: T714233



-Plug Ground Bar Cutting Tool

P/N: WT-FIJW-10-\*\*

Tool Handling Instruction: T714261



-Plug Ground Bar Press-in Tool

P/N: WT-FIJW-1-\*\*

Tool Handling Instruction: T714299



Japan Aviation Electronics Industry, Limited

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.