

**NEW**



FFC Harness for High Speed Transmission

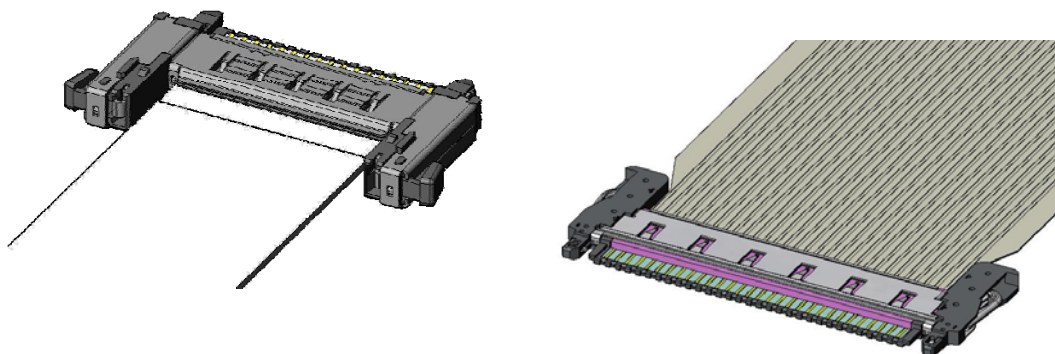
CONNECTOR

MB-0163-1

November 2006

# JF04 Series

**RoHS Compliant**



&lt;&lt;Outline&gt;&gt;

High speed serial transmission such as LVDS, TMDS(HDMI), PCI express are beginning to be widely used, not only in the personal computer market but also in various markets such as TV, consumer device, PPC and medical device markets. At the same time in the expanding markets including LCD TV, there are strong demands for reasonably priced high speed transmission cables.

JF04 is the connector harness just to answer those demands.

**Features**

- Can be mated with FI-R and FIX connectors
- 1m min. transmission of serial signal of LVDS, TMDS etc. is possible
- Matches with 100ohm differential characteristic impedance.  
Ground of the cable area is reinforced by the ground layer.
- Features of the connector mating area is in common with FI-X, FI-R

**General Specification**

FI-R Type  
JF04R0R0\*\*

- |  |  |
|--|--|
| •No. of Contacts: 21, 31, 41, 51 pos.                        | •Rated current: AC, DC each 0.3A/ terminal                       |
| •Contact resistance: 40m ohm max.                            | •Insulation resistance: 100M ohm min.                            |
| •Dielectric withstanding voltage:<br>AC250 Vr.m.s per minute | •Pitch: 0.5mm  |
| •Operating temperature:<br>-40 Deg. C to +80 Deg. C          | •Impedance: Connector; 100ohm $\pm$ 15%<br>FFC; 100ohm $\pm$ 10% |

General Specification
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FI-R Type  
JF04X0X0\*\*

- No. of Contacts: 30 pos.
- Contact resistance: 40m ohm max.
- Dielectric withstanding voltage:  
AC250 Vr.m.s per minute
- Operating temperature:  
-40 Deg. C to +80 Deg. C
- Rated current: AC, DC each 0.4A/ terminal
- Insulation resistance: 100M ohm min.
- Pitch: 1mm
- Impedance: Connector; 100ohm  $\pm$  15%  
FFC; 100ohm  $\pm$ 10%

Materials and Finishes
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FI-R Type

JF04R0R0\*\*

Components	Materials and Finishes
FFC	PET, copper/ Contact portion Au plating
Base shell	Copper alloy/ Sn plating
Base insulator	Heat resistant plastic/ none
Lock spring	Stainless steel/ none
Cover shell	Copper alloy/ Sn plating
Cover insulator	Heat resistant plastic/ none

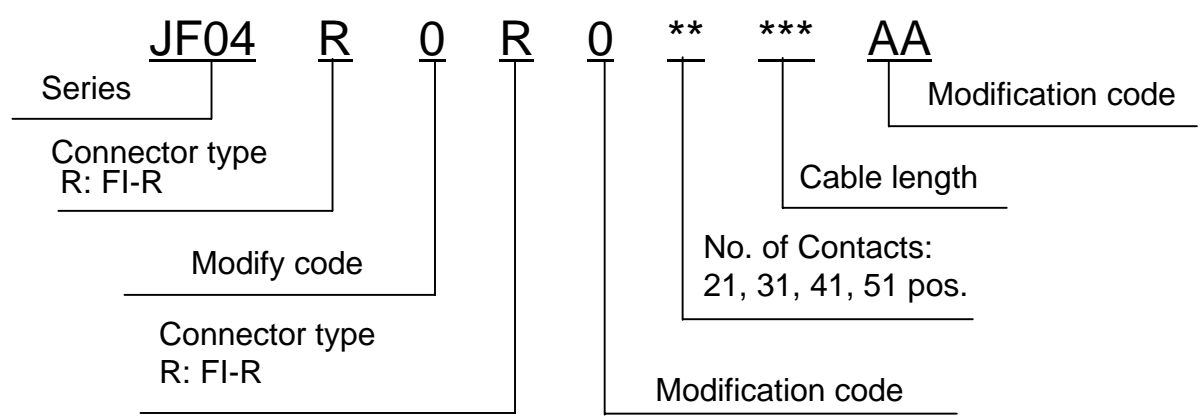
FI-R Type

JF04X0X0\*\*

Components	Materials and Finishes
FFC	PET, Copper/ Contact portion Au plating
Base shell	Stainless steel/ Sn plating
Base insulator	Heat resistant plastic/ none
Lock spring	Stainless steel/ none
Cover shell	Stainless steel/ Sn plating
Cover insulator	Heat resistant plastic/ none

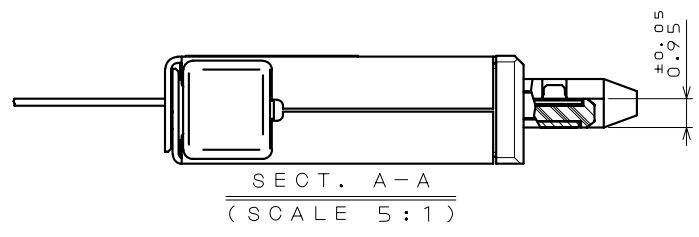
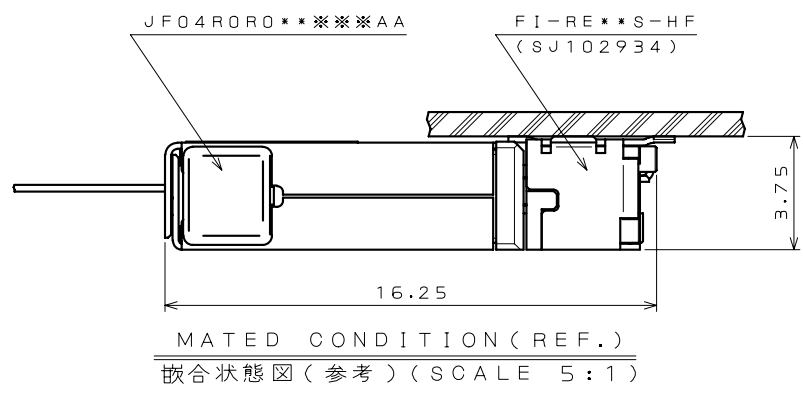
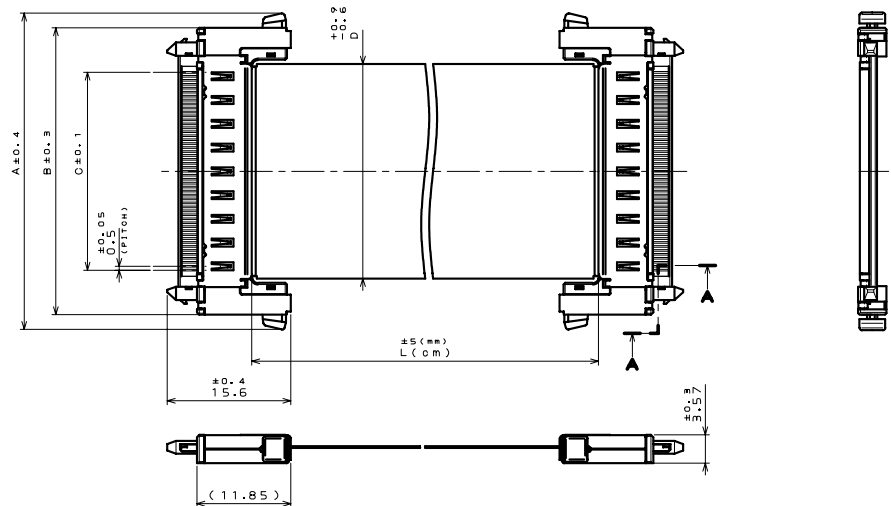
Ordering Information

FI-R Type (SJ069131)



\*Connectors are not sold individually.

Unit: mm

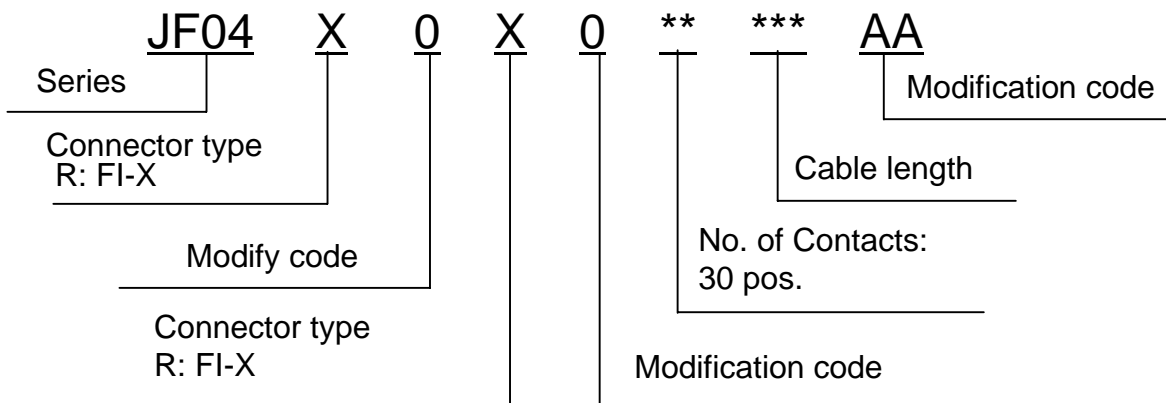


Dimensions

No. OF CONTACT	A±0.4	B ±0.3	C±0.1	$\Delta$ D $\begin{smallmatrix} +0.9 \\ -0.6 \end{smallmatrix}$
21	25	21.25	10	12.1
31	30	26.25	15	17.1
41	35	31.25	20	22.1
51	40	36.25	25	27.1

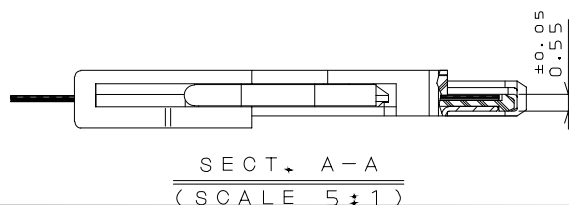
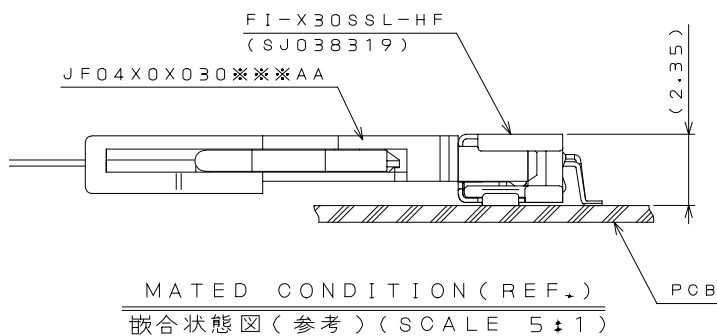
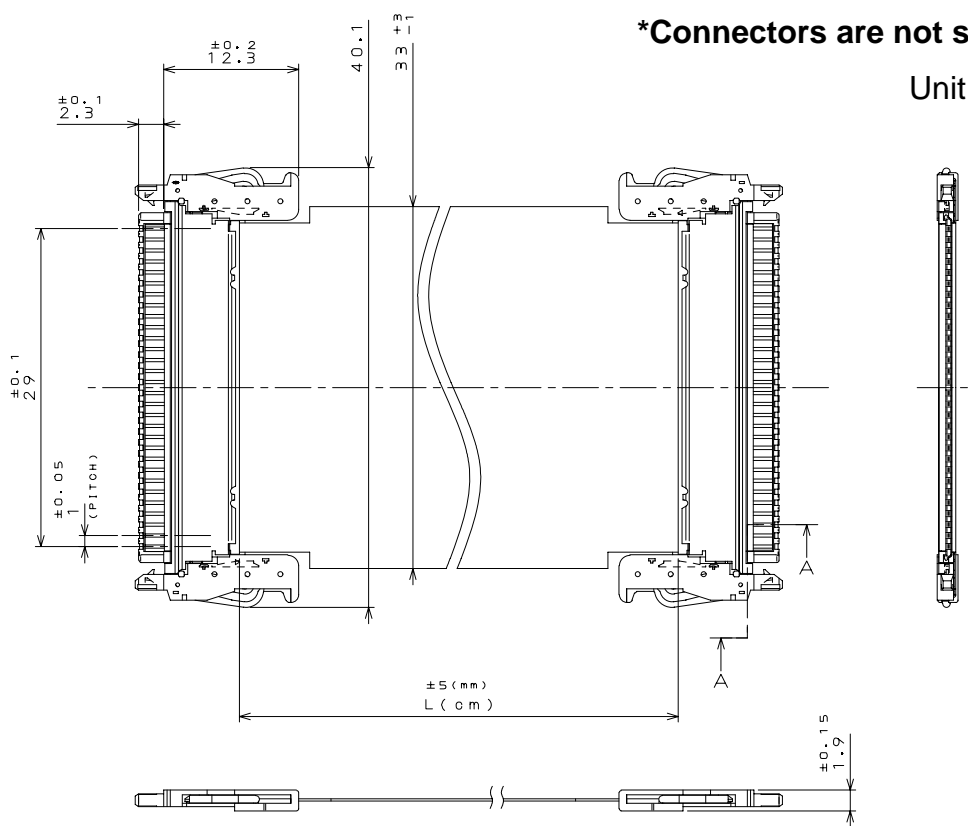
Ordering Information

FI-X Type (SJ069142)



\*Connectors are not sold individually.

Unit: mm



## Lineup

**FI-R Type**

No. of Contacts	Length of FPC	Part Number	No. of Contacts	Length of FPC	Part Number
21	10cm	JF04R0R021010AA	31	10cm	JF04R0R031010AA
	20cm	JF04R0R021020AA		20cm	JF04R0R031020AA
	30cm	JF04R0R021030AA		30cm	JF04R0R031030AA
	40cm	JF04R0R021040AA		40cm	JF04R0R031040AA
	50cm	JF04R0R021050AA		50cm	JF04R0R031050AA
	80cm	JF04R0R021080AA		80cm	JF04R0R031080AA
	100cm	JF04R0R021100AA		100cm	JF04R0R031100AA

No. of Contacts	Length of FPC	Part Number	No. of Contacts	Length of FPC	Part Number
41	10cm	JF04R0R041010AA	51	10cm	JF04R0R051010AA
	20cm	JF04R0R041020AA		20cm	JF04R0R051020AA
	30cm	JF04R0R041030AA		30cm	JF04R0R051030AA
	40cm	JF04R0R041040AA		40cm	JF04R0R051040AA
	50cm	JF04R0R041050AA		50cm	JF04R0R051050AA
	80cm	JF04R0R041080AA		80cm	JF04R0R051080AA
	100cm	JF04R0R041100AA		100cm	JF04R0R051100AA

**FI-X Type**

No. of Contacts	Length of FPC	Part Number
30	20cm	JF04R0R021020AA

Note 1. Above shows the standard length

Please contact us concerning lengths not in above

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**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.