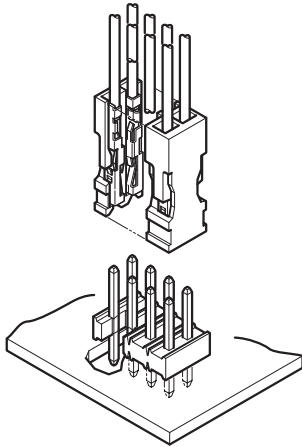


# RF CONNECTOR

2.54 mm pitch/Wire-to-Board connectors/Crimp style and Mating style



The RF connector is a highly reliable, low-cost, crimp style connector offered in wire-to-board configuration. It was developed for internal wiring in office automation (OA) equipment, including personal computers, office computers, computer peripherals as well as servers for computer networking. This connector is also suitable for various precision electronic equipment.

## ■ Features

### • High reliability, cost-effective

With the use of our proprietary double-leaf spring contact structure, this connector demonstrates a highly stable level of performance, especially when higher mating cycles are required. Each contact and pin header is selectively gold-plated for cost-saving purposes. Depending on the application and technical requirements, fully tin-plated contacts and pin headers are also an option with the RF connector, which can further reduce equipment manufacturing costs.

### • Designed to support a high-density board layout in a dual row, space-saving configuration.

The structure consists of 2 rows at 2.54mm pitch between rows and enables mounting without any loss in pitch which facilitates high-density circuit board designs.

### • Ease of operation

This connector features a housing lance function which minimizes insertion force and ensures stability when inserting contacts into the housing. In addition, the position of the contacts after insertion into the housing can be visually confirmed. This enhances workability in the insertion and inspection process, leading to a significant improvement in operability.

### • The header can be easily cut to any length to achieve the desired number of circuits.

The header comes with notches that allow it to be cut to the desired number of circuits without the need for special tools.

## ■ Specifications

- Current rating: 2 A AC/DC (AWG #24)
  - Voltage rating: 250 V AC/DC
  - Temperature range:
    - Gold-plated product/ -55°C to +105°C
    - Tin-plated product/ -55°C to +85°C
    - (including temperature rise in applying electrical current)
  - Contact resistance:
    - Initial value/ 15 mΩ max.
    - After environmental tests/ 30 mΩ max.
  - Insulation resistance: 1,000 MΩ min.
  - Withstanding voltage:
    - There shall be no breakdown or flashover while applying 1,500 VAC for one minute.
  - Applicable wire range:
    - Conductor size/ AWG #30 to AWG #24
    - Insulation O.D./ φ 0.9 mm to φ 1.5 mm
  - Applicable PC board thickness: 1.2 mm to 1.6 mm
- \* Please refer to the "Handling Precautions for Terminals and Connectors" on our website (listed in the "Technical Documents" column on the Product Information page) before use.
- \* RoHS2 compliance
- \* Dimensional unit: mm
- \* Contact JST for details.

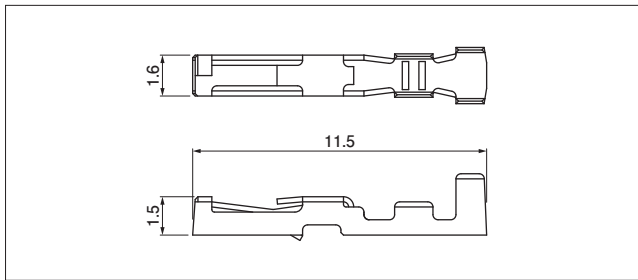
## ■ Standards

For information on overseas standard registrations, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

- \* Specifications registered to overseas standards may differ from the general specifications listed above.

# RF CONNECTOR

## Contact



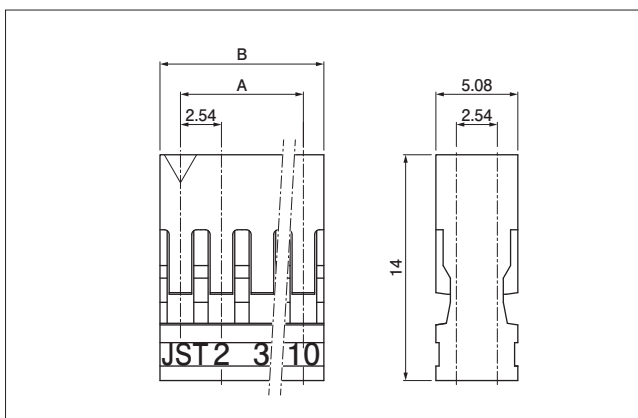
Model No.	Applicable wire range		Q'ty/ reel
	Conductor size AWG (mm <sup>2</sup> )	Insulation O.D. (mm)	
RF-SC2210	#30 to #24 (0.05 to 0.22)	0.9 to 1.5	10,000
RF-SC2290			

Material and Surface finish, etc.

Copper alloy,  
RF-SC2210...Contact part/ gold-plated, Crimping part/ tin-plated  
RF-SC2290...tin-plated

Note: RF-SC2210 displays (LF)(SN) on a label.

## Housing



No. of circuits	Model No.	Dimensions (mm)		Q'ty/box
		A	B	
6	RF-06	5.08	7.62	500
8	RF-08	7.62	10.16	500
10	RF-10	10.16	12.7	500
12	RF-12	12.7	15.24	500
14	RF-14	15.24	17.78	300
16	RF-16	17.78	20.32	300
20	RF-20	22.86	25.4	200
28	RF-28	33.02	35.56	200

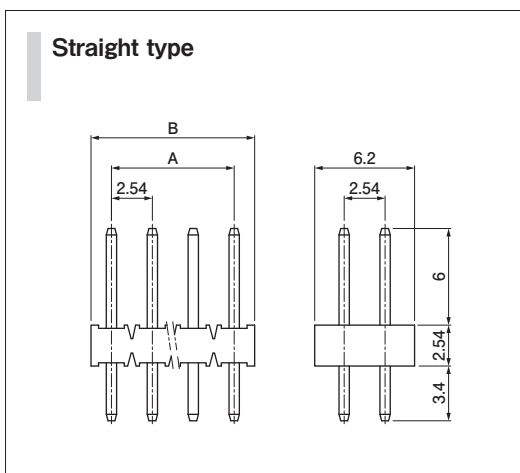
Material and Surface finish, etc.

PBT (GF), black

Note: For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

## Header

### Straight type



No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	Gold-plated	Tin-plated	A	B	
2	RF-H022TD-1130	RF-H022TD-1190	—	2.54	2,000
4	RF-H042TD-1130	RF-H042TD-1190	2.54	5.08	2,000
6	RF-H062TD-1130	RF-H062TD-1190	5.08	7.62	1,000
8	RF-H082TD-1130	RF-H082TD-1190	7.62	10.16	1,000
10	RF-H102TD-1130	RF-H102TD-1190	10.16	12.70	1,000
12	RF-H122TD-1130	RF-H122TD-1190	12.70	15.24	500
14	RF-H142TD-1130	RF-H142TD-1190	15.24	17.78	500
16	RF-H162TD-1130	RF-H162TD-1190	17.78	20.32	500
18	—	RF-H182TD-1190	20.32	22.86	250
20	RF-H202TD-1130	RF-H202TD-1190	22.86	25.40	250
22	—	RF-H222TD-1190	25.40	27.94	250
26	RF-H262TD-1130	RF-H262TD-1190	30.48	33.02	250
28	RF-H282TD-1130	RF-H282TD-1190	33.02	35.56	200
34	RF-H342TD-1130	—	40.64	43.18	200
40	RF-H402TD-1130	RF-H402TD-1190	48.26	50.80	100
60	RF-H602TD-1130	—	73.66	76.20	100

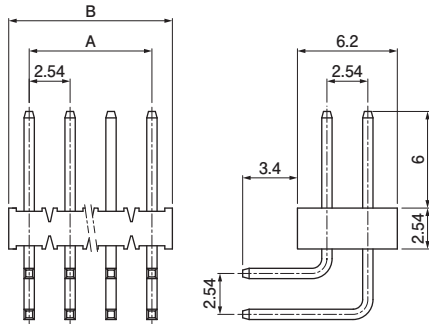
Material and Surface finish, etc.

Post: Copper alloy,  
RF-H ( ) 2TD-1130...gold-plated  
RF-H ( ) 2TD-1190...tin-plated  
Base housing: PBT (GF), black

Note: 1. Tin-plated product displays (LF)(SN) on a label.  
2. Contact JST for special products.  
3. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

## Header

### Right angle type



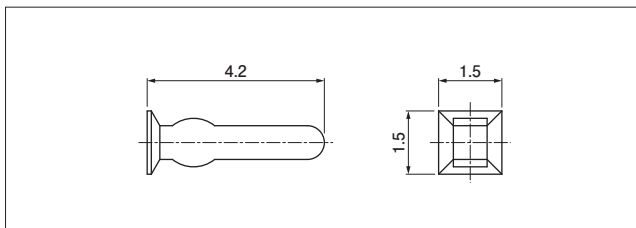
No. of circuits	Model No.		Dimensions (mm)		Q'ty/box
	Selective gold-plated	Tin-plated	A	B	
4	RF-H042SD-1110	RF-H042SD-1190	2.54	5.08	1,000
6	RF-H062SD-1110	RF-H062SD-1190	5.08	7.62	1,000
8	RF-H082SD-1110	RF-H082SD-1190	7.62	10.16	500
10	RF-H102SD-1110	RF-H102SD-1190	10.16	12.70	500
12	RF-H122SD-1110	RF-H122SD-1190	12.70	15.24	500
14	RF-H142SD-1110	RF-H142SD-1190	15.24	17.78	250
16	RF-H162SD-1110	RF-H162SD-1190	17.78	20.32	250
18	RF-H182SD-1110	—	20.32	22.86	250
20	RF-H202SD-1110	RF-H202SD-1190	22.86	25.40	250
26	—	RF-H262SD-1190	30.48	33.02	200
28	—	RF-H282SD-1190	33.02	35.56	200
30	—	RF-H302SD-1190	35.56	38.10	100
34	RF-H342SD-1110	RF-H342SD-1190	40.64	43.18	100
40	—	RF-H402SD-1190	48.26	50.80	100
48	—	RF-H482SD-1190	58.42	60.96	100
60	—	RF-H602SD-1190	73.66	76.20	100

Material and Surface finish, etc.

Post: Copper alloy,  
 RF-H ( ) 2SD-1110...Contact part / gold-plated, Soldering part / tin-plated  
 RF-H ( ) 2SD-1190...tin-plated  
 Base housing: PBT (GF), black

- Note: 1. This product displays (LF)(SN) on a label.  
 2. Contact JST for special products.  
 3. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

## Polarizing key



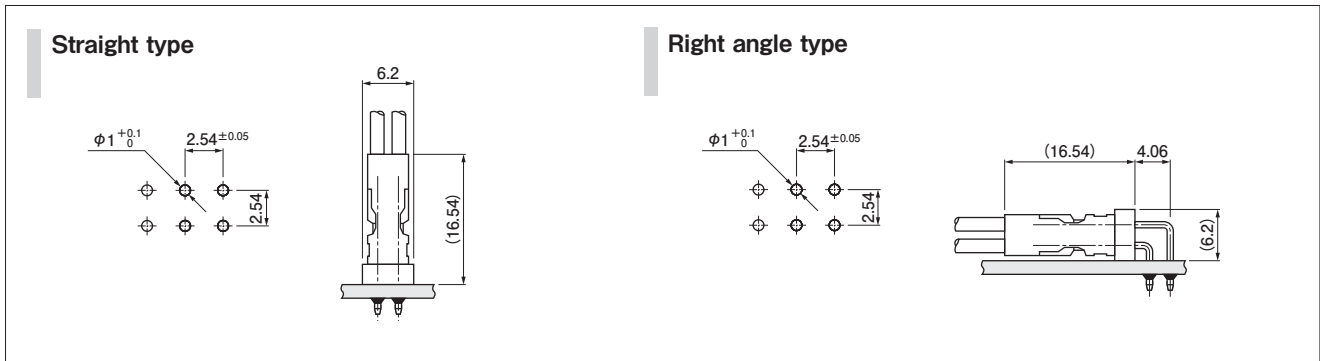
Model No.	Q'ty/bag
PK-RF-1	10,000

Material and Surface finish, etc.

PBT (GF), natural (white)

- Note: 1. The polarizing key in the housing prevents misinsertion upon mating with the header. In addition, the housing cavity equipped with the polarizing key is used in combination with the header assigned without a pin in that position.  
 2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

## PC board layout and Assembly layout



Note: 1. The PC board layout figure shown is viewed from the connector mounting surface.  
 2. Tolerance for the PCB hole pitch shall be  $\pm 0.05$  and shall not accumulate.  
 3. Hole dimensions differ depending on the type of PCB and PCB drilling method.  
 The above dimensions are for reference only. Please contact JST for further details.

## Model number allocation

### Contact

**RF - S C 2 2 1 0**

Series name	RF
Supply form: Strip form	S
Type: Contact	C
Applicable wire range: AWG #30 to AWG #24	2
Material: Copper alloy	2
Surface finish of contact part: 10...Gold-plated, 90...Tin-plated	1 0

### Housing

**RF - 06**

Series name	RF
No. of circuits	06

### Header

**RF - H 3 4 2 TD - 1 1 3 0**

Series name	RF
Type: Header	H
No. of circuits	3
Mating side post length: 6.0	4
PC board mounting method:	TD
TD...Straight type, through-hole	
SD...Right angle type, through-hole	
Header color: Black	-
Post material: Copper alloy	1
Surface finish of post: 10...Selective gold-plated	1
30...Overall gold-plated	
90...Tin-plated	3 0

### Polarizing key

**PK - RF - 1**

Type: Polarizing key	PK
Series name	RF
Material and Color: PBT (GF), Natural (White)	- 1

## Crimping machine, Applicator

Contact	Crimping machine	Applicator	Crimp applicator with dies
RF-SC2210 RF-SC2290	AP-K2N	MKS-L	APLMK RF-SC22

Note: Contact JST for fully automatic crimping applicator.