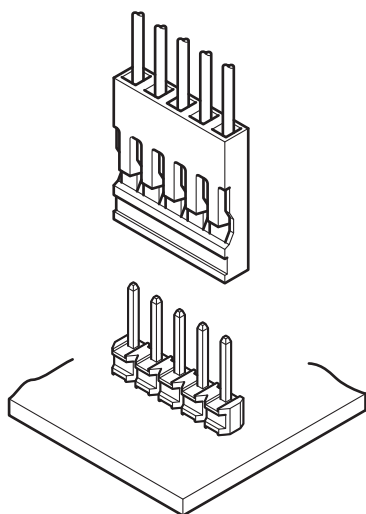


# RE CONNECTOR

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



The RE 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 RE connector, which can further reduce equipment manufacturing costs.

### • Designed to accommodate high-density layouts on thin and compact PCBs

The straight type features a thickness (depth) of 2.66 mm and a mating height of 16.54 mm, contributing to the high-density layout of PCBs.

### • 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

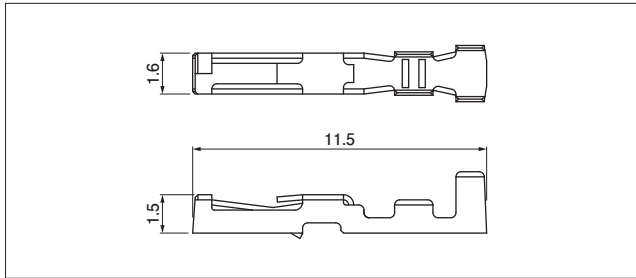
- Current rating: 2 A AC/DC (AWG #24)
  - Voltage rating: 250 V AC/DC
  - Temperature range:
    - Gold-plated product/ -55°C to +105°C
    - Tin-plated product/ -55°C to +85°C
    - (including temperature rise in applying electrical current)
  - Contact resistance:
    - Initial value/ 15 mΩ max.
    - 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./  $\phi$  0.9 mm to  $\phi$  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.

## Contact



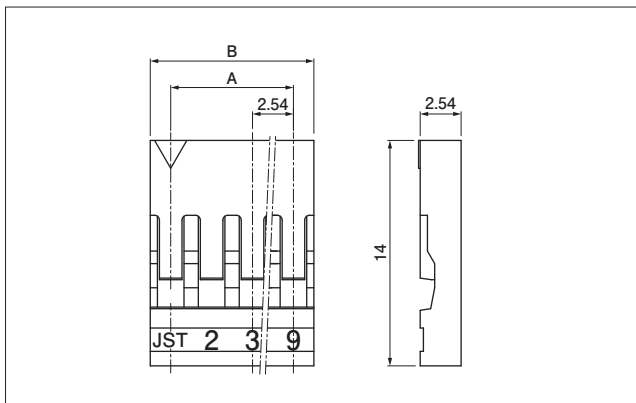
Model No.	Applicable wire range		Q'ty/ reel
	Conductor size AWG (mm <sup>2</sup> )	Insulation O.D. (mm)	
RF-SC2210	#30 to #24 (0.05 to 0.22)	0.9 to 1.5	10,000
RF-SC2290			

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	
2	RE-02	2.54	5.08	1,000
4	RE-04	7.62	10.16	1,000
5	RE-05	10.16	12.70	1,000
8	RE-08	17.78	20.32	500
9	RE-09	20.32	22.86	500

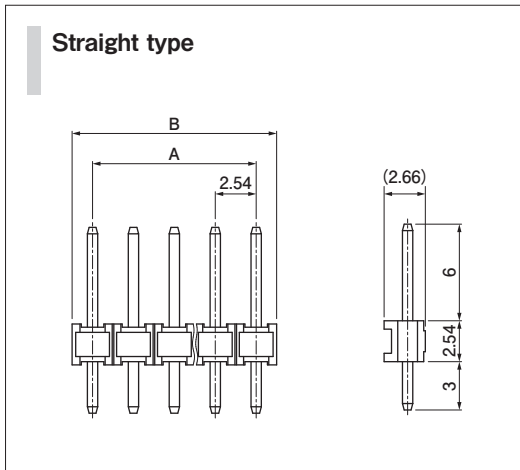
Material and Surface finish, etc.

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	
1	RE-H012TD-1130	RE-H012TD-1190	—	2.54	2,000
2	RE-H022TD-1130	RE-H022TD-1190	2.54	5.08	2,000
3	RE-H032TD-1130	RE-H032TD-1190	5.08	7.62	2,000
4	RE-H042TD-1130	RE-H042TD-1190	7.62	10.16	1,000
5	RE-H052TD-1130	RE-H052TD-1190	10.16	12.70	1,000
6	RE-H062TD-1130	RE-H062TD-1190	12.70	15.24	1,000
7	RE-H072TD-1130	RE-H072TD-1190	15.24	17.78	1,000
8	RE-H082TD-1130	RE-H082TD-1190	17.78	20.32	1,000
9	RE-H092TD-1130	RE-H092TD-1190	20.32	22.86	500
10	RE-H102TD-1130	RE-H102TD-1190	22.86	25.40	500
11	RE-H112TD-1130	—	25.40	27.94	500
12	RE-H122TD-1130	RE-H122TD-1190	27.94	30.48	500
14	RE-H142TD-1130	RE-H142TD-1190	33.02	35.56	500
16	RE-H162TD-1130	RE-H162TD-1190	38.10	40.64	500
20	—	RE-H202TD-1190	48.26	50.80	250
21	—	RE-H212TD-1190	50.80	53.34	250
30	RE-H302TD-1130	RE-H302TD-1190	73.66	76.20	200

Material and Surface finish, etc.

Post: Copper alloy,  
RE-H ( ) 2TD-1130...gold-plated  
RE-H ( ) 2TD-1190...tin-plated

Base housing: PBT (GF), black

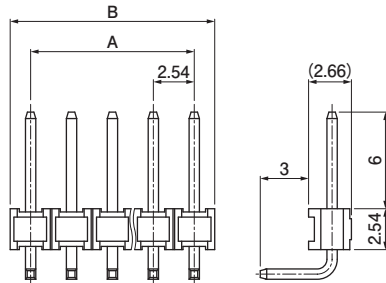
Note: 1. Tin-plated product displays (LF)(SN) on a label.

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	
2	RE-H022SD-1110	RE-H022SD-1190	2.54	5.08	2,000
3	RE-H032SD-1110	RE-H032SD-1190	5.08	7.62	2,000
4	RE-H042SD-1110	RE-H042SD-1190	7.62	10.16	1,000
5	RE-H052SD-1110	RE-H052SD-1190	10.16	12.70	1,000
6	RE-H062SD-1110	RE-H062SD-1190	12.70	15.24	1,000
7	—	RE-H072SD-1190	15.24	17.78	1,000
8	RE-H082SD-1110	RE-H082SD-1190	17.78	20.32	500
9	RE-H092SD-1110	RE-H092SD-1190	20.32	22.86	500
10	—	RE-H102SD-1190	22.86	25.40	500
11	—	RE-H112SD-1190	25.40	27.94	500
12	—	RE-H122SD-1190	27.94	30.48	500
14	—	RE-H142SD-1190	33.02	35.56	250
15	—	RE-H152SD-1190	35.56	38.10	250
16	RE-H162SD-1110	RE-H162SD-1190	38.10	40.64	250
18	—	RE-H182SD-1190	43.18	45.72	250
21	—	RE-H212SD-1190	50.80	53.34	200
28	—	RE-H282SD-1190	68.58	71.12	200
30	—	RE-H302SD-1190	73.66	76.20	200

Material and Surface finish, etc.

Post: Copper alloy,

RE-H ( ) 2SD-1110...Contact part / gold-plated, Soldering part / tin-plated

RE-H ( ) 2SD-1190...tin-plated

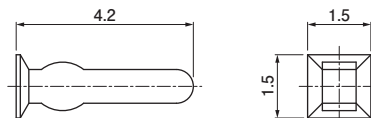
Base housing: PBT (GF), black

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.

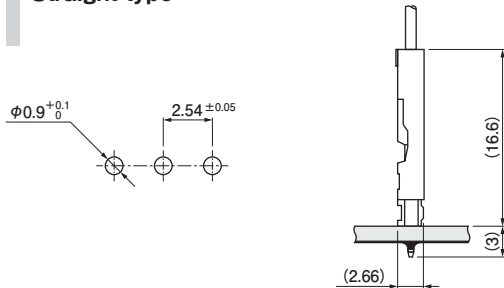
PBT (GF), natural (white)

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.

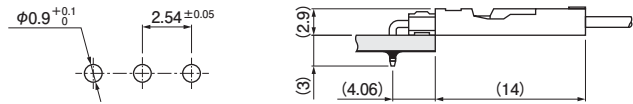
2. For flame retardant grade of resin material used, please refer to the "List of Registered Overseas Standards" on our website (listed in the "Technical Documents" column on the Product Information page).

## PC board layout and Assembly layout

### Straight type



### Right angle type



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 reference values. Please contact JST for details.

## Model number allocation

### Contact

RF - S C 2 2 10

Series name

Supply form: Strip form

Type: Contact

Applicable wire range: AWG #30 to AWG #24

Material: Copper alloy

Surface finish of contact part: 10...Gold-plated  
 90...Tin-plated

### Housing

RE - 02

Series name

No. of circuits

### Header

RE - H 02 2 TD - 1 1 90

Series name

Type: Header

No. of circuits

Mating side post length: 6.0

PC board mounting method:

TD...Straight type, through-hole

SD...Right angle type, through-hole

Header color: Black

Post material: Copper alloy

Surface finish of post: 10...Selective gold-plated  
 30...Overall gold-plated  
 90...Tin-plated

### Polarizing key

PK - RF - 1

Type: Polarizing key

Series name

Material and Color: PBT (GF) , Natural (White)

## Crimping machine, Applicator

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

Note: Contact JST for fully automatic crimping applicator.