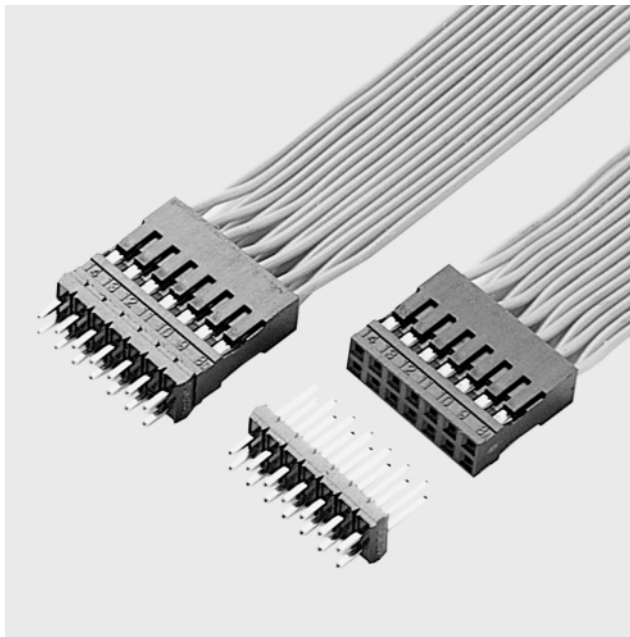
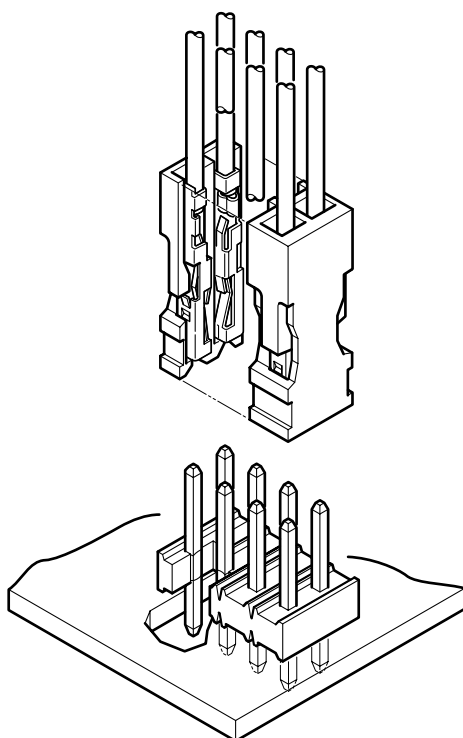


# RF CONNECTOR

Disconnectable Crimp style connectors



**The RF connector was developed as a highly reliable, low-cost, crimp style connector for connecting wires to printed circuit boards. Well suited for internal connections in office automation equipment, such as personal computers, office computers and their peripheral devices.**



## Features

- **Highly reliable, yet low in cost**

Our original double-leaf spring construction withstands the stresses caused by repeated insertions and withdrawals and ensures reliable contact performance. Depending on the application, the socket contacts and header posts can be selectively gold-plated or fully tin-plated to minimize costs.

- **Space-saving, high-density design**

The 2.54mm pitch contacts are arranged in two rows. The mated connectors can be placed side by side or end to end without a loss in pitch. This facilitates space-saving, high-density circuit designs.

- **Easy connection**

A slight force is all that is required for contact insertion because the housing has resilient lances. Furthermore, the positions of the contacts in the housing can be visually checked. This facilitates insertion of the contacts in the housing.

- **It can be cut to any length to provide a header with any number of circuits**

Notches are provided on the insulator that allow it to be cut to any length without using special tools.

## Specifications

- Current rating: 2A AC, DC (AWG #24)
- Voltage rating: 250V AC, DC
- Temperature range: (including temperature rise in applying electrical current)
  - 55°C to +105°C (gold-plated)
  - 55°C to +85°C (tin-plated)
- Contact resistance: Initial value/15m Ω max.  
After environmental testing/30m Ω max.
- Insulation resistance: 1,000M Ω min.
- Withstanding voltage: 1,500V AC/minute
- Applicable wire: AWG #30 to #24
- Applicable PC board thickness: 1.2 to 1.6mm
- \* RoHS compliant products are published.
- \* Refer to "General Instruction and Notice when using Terminals and Connectors" at the end of this catalog.
- \* Contact JST for details.

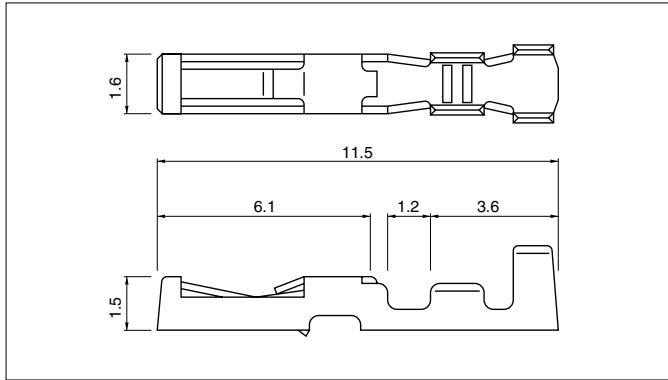
## Standards

Recognized E60389

Certified LR20812

# RF CONNECTOR

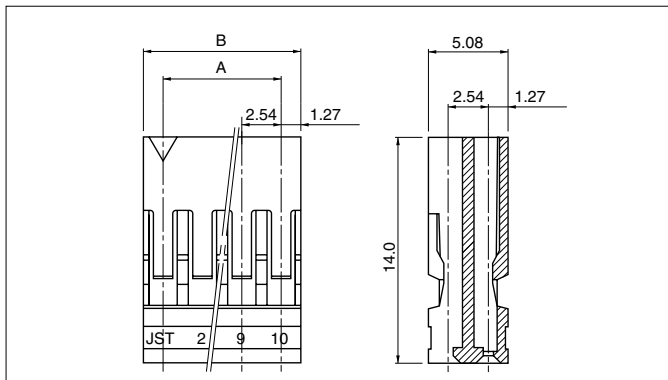
## Contact



| Model No.        | Applicable wire |          |                      | Finish  | Q'ty / reel |
|------------------|-----------------|----------|----------------------|---|-------------|
|                  | mm <sup>2</sup> | AWG #    | Insulation O.D. (mm) |   |             |
| <b>RF-SC2210</b> | 0.05 to 0.22    | 30 to 24 | 0.9 to 1.5           | Nickel-undercoated,<br>Mating part; gold-plated | 10,000      |
| <b>RF-SC2290</b> |                 |          |                      | Crimping part; tin-plated (reflow treatment)    |             |
| <b>Material</b>  |                 |          |                      |   |             |
| Phosphor bronze  |                 |          |                      |   |             |

**RoHS compliance** RF-SC2210 displays (LF)(SN) on a label.

## Housing



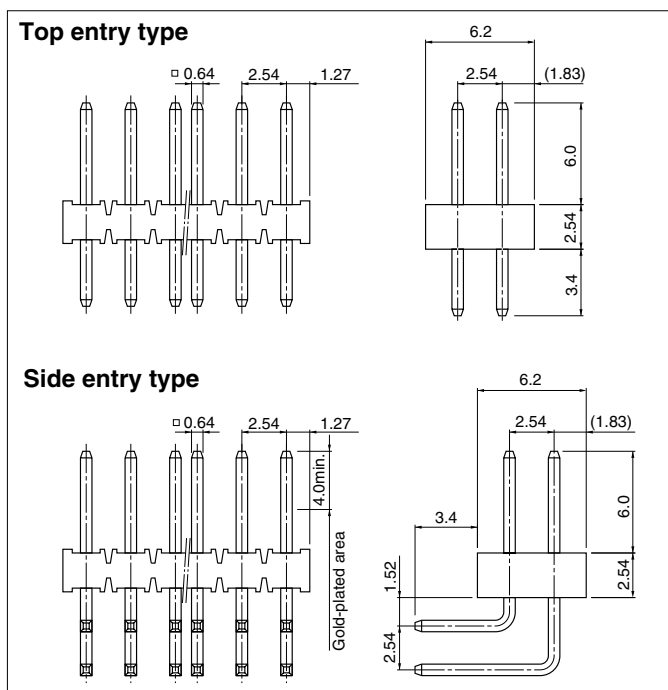
| Circuits | Model No.    | Dimensions (mm) |       | Q'ty / box |
|----------|--------------|-----------------|-------|------------|
|          |              | A               | B     |            |
| 6        | <b>RF-06</b> | 5.08            | 7.62  | 500        |
| 8        | <b>RF-08</b> | 7.62            | 10.16 | 500        |
| 10       | <b>RF-10</b> | 10.16           | 12.70 | 500        |
| 12       | <b>RF-12</b> | 12.70           | 15.24 | 500        |
| 14       | <b>RF-14</b> | 15.24           | 17.78 | 300        |
| 16       | <b>RF-16</b> | 17.78           | 20.32 | 300        |
| 20       | <b>RF-20</b> | 22.86           | 25.40 | 200        |
| 28       | <b>RF-28</b> | 33.02           | 35.56 | 200        |

### Material

PBT, UL94V-0, black

**RoHS compliance**

## Header



### Top entry type

| Model No.                    | Material                            |       | Finish   |
|------------------------------|-------------------------------------|-------|--|
|                              | Wafer                               | Post  |  |
| <b>RF-H( *)<br/>2TD-1130</b> | PBT,<br>UL94V-0,<br>black (natural) | Brass | Nickel-undercoated,<br>gold-plated                   |
| <b>RF-H( *)<br/>2TD-1190</b> |                                     |       | Copper-undercoated, tin-plated<br>(reflow treatment) |

### Side entry type

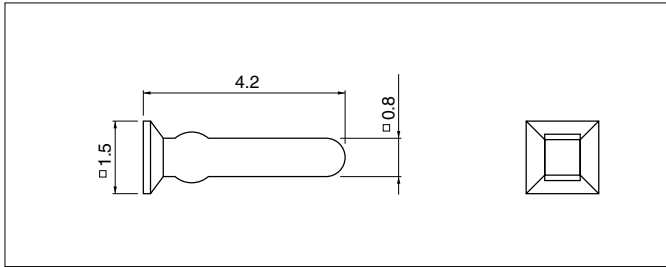
| Model No.                    | Material                            |       | Finish  |
|------------------------------|-------------------------------------|-------|---|
|                              | Wafer                               | Post  |   |
| <b>RF-H( *)<br/>2SD-1110</b> | PBT,<br>UL94V-0,<br>black (natural) | Brass | Nickel-undercoated,<br>Mating part; gold-plated<br>Solder tail; tin-plated (reflow treatment) |
| <b>RF-H( *)<br/>2SD-1190</b> |                                     |       | Copper-undercoated, tin-plated<br>(reflow treatment)  |

**RoHS compliance** Tin-plated product displays (LF)(SN) on a label.

Note:

1. A two-digit number (06 to 16 even numbers only, 20 and 28) representing the number of circuits should be inserted in ( \* ). Determine the number depending on the number of circuits of the housing or header.
2. Contact JST for special products.

## Polarizing key

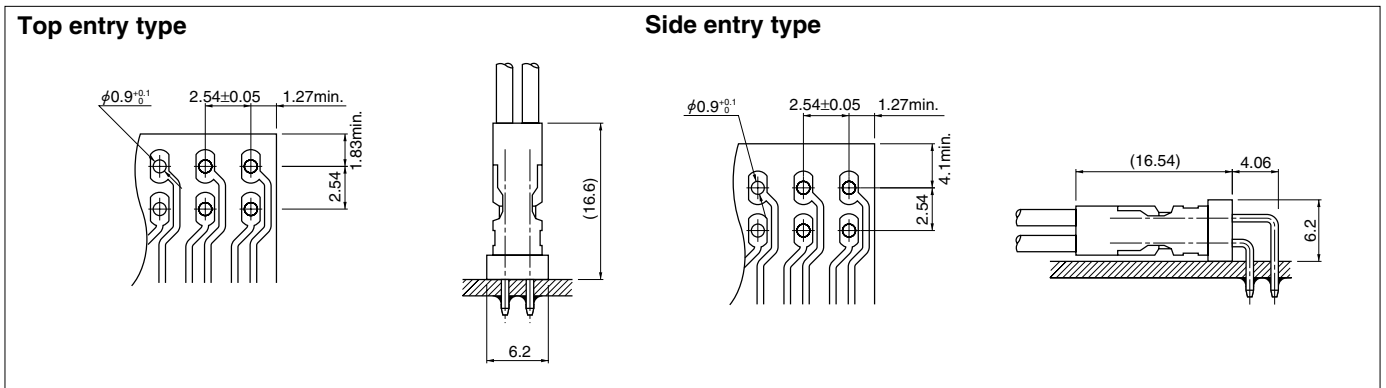


| Model No.                     | Q'ty / bag |
|-------------------------------|------------|
| PK-RF-1                       | 2,000      |
| Material                      |            |
| PBT, UL94V-0, natural (white) |            |

### RoHS compliance

Polarizing key: The polarizing key in the housing prevents misinsertion of the connector to the header.

## PC board layout (viewed from soldering side) and Assembly layout



### Note:

1. Tolerances are non-cumulative:  $\pm 0.05\text{mm}$  for all centers.
2. Hole dimensions differ according to the kind of PC board and piercing method. The dimensions above should serve as a guideline. Contact JST for details.

## Crimping machine, Applicator

| Contact   | Crimping machine | Crimp applicator | Dies       | Crimp applicator with dies |
|-----------|------------------|------------------|------------|----------------------------|
| RF-SC2210 | AP-K2N           | MKS-L            | MK/RF-SC22 | APLMK RF-SC22              |
| RF-SC2290 |                  | —                | —          | —                          |