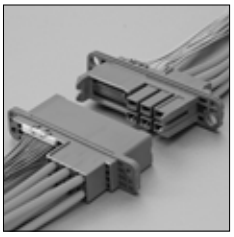
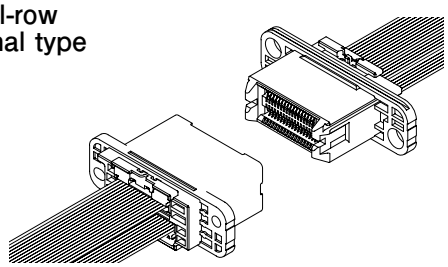


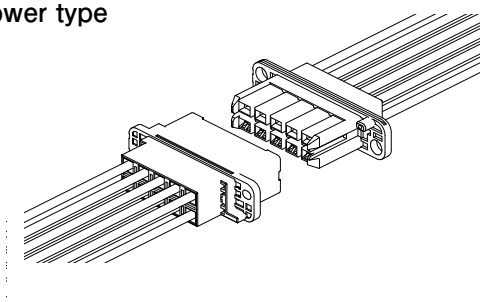
# RFC CONNECTOR

**Wire-to-Wire connectors**

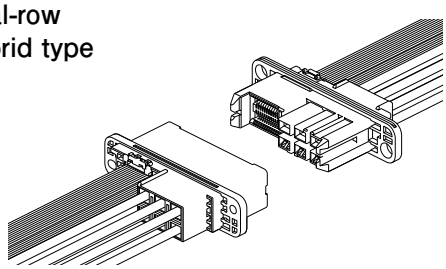
Dual-row
Signal type



Dual-row
Power type



Dual-row
Hybrid type



This is a hybrid-type drawer connector that combines both signal and power lines designed for unit-to-unit connections.
It can absorb misalignment and small movements between units while featuring a highly reliable dual-contact structure to ensure stable connectivity.
The RFC connector also provides exceptional durability when mating and unmating the connector.

## ■ Specifications

- Current rating:
  Signal line: 1.0 A AC/DC (AWG #26, #27)
  Power line: (6 circuits or less) 15 A AC/DC (AWG #14)
  (10 circuits) 12 A AC/DC (AWG #14)
- Voltage rating: Signal line: 50 V AC/DC
  Power line: 250 V AC/DC
- Temperature range: −25℃ to +85℃
  (including temperature rise in applying electrical current)
- Contact resistance:
  Signal line: Initial value/ 40 mΩ max.
  After environmental tests/ 60 mΩ max.
  Power line: Initial value/ 10 mΩ max.
  After environmental tests/ 20 mΩ max.
- Insulation resistance: 500 MΩ min.
- Withstanding voltage:
  Signal line: There shall be no breakdown or flashover while applying 500 VAC for one minute.
  Power line: There shall be no breakdown or flashover while applying 1,500 VAC for one minute.
- Applicable wire range:
  Power line: Conductor size / AWG #22 to AWG #14
  Insulation O.D. / $\phi$ 1.55 mm to $\phi$ 3.6 mm
  Signal line for power: Conductor size / AWG #30 to AWG #26
  Insulation O.D. / $\phi$ 0.6 mm to $\phi$ 0.8 mm
  Signal line for receptacle: Applicable socket / CSR and CSH connectors
- Guaranteed mating cycles: 5,000 times

* 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

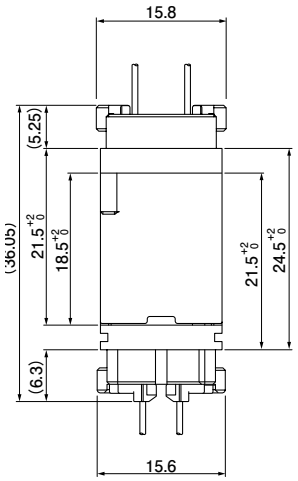
For information on overseas standard registrations, please refer to the “List of Registered Overseas Standards” on our website (listed in the “Technical Documents” column on the Product Information page).
※ Specifications registered to overseas standards may differ from the general specifications listed above.

## Assembly layout and Panel layout

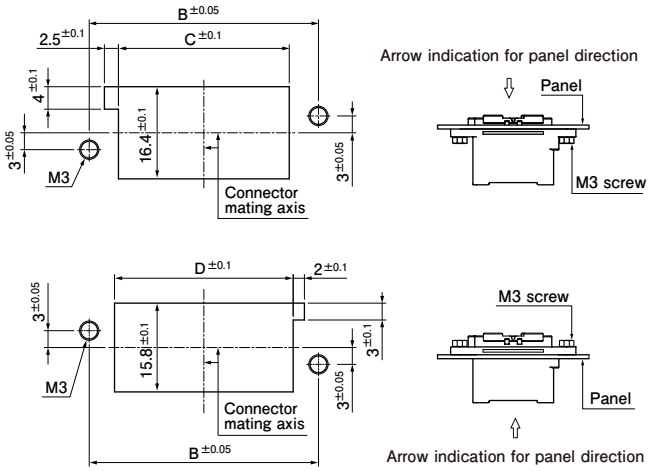
### Dual-row Signal type

**・Plug**

Panel thickness：t 0.8 to 2.0

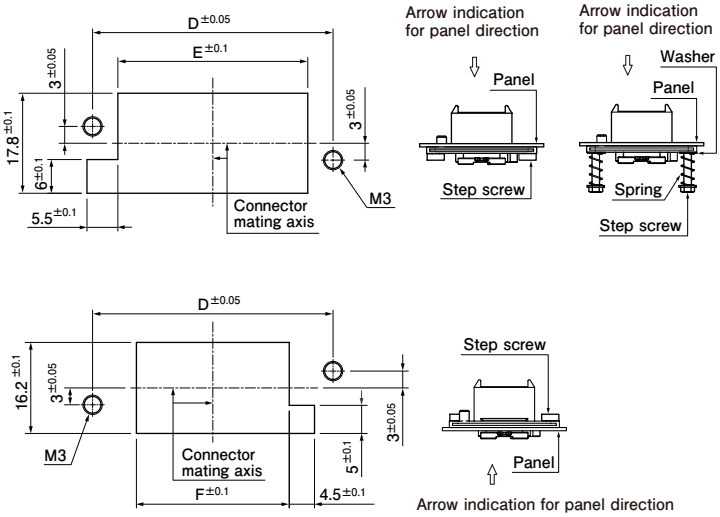



| Model No. | Dimensions | | |
|---|---|---|---|
| | B | C | D |
| RFCP-28W0-E | 36.8 | 26.4 | 27.8 |
| RFCP-36W0-E | 40.8 | 30.4 | 31.8 |
| RFCP-44W0-E | 44.8 | 34.4 | 35.8 |




**・Receptacle**

Panel thickness：t 0.8 to 2.0

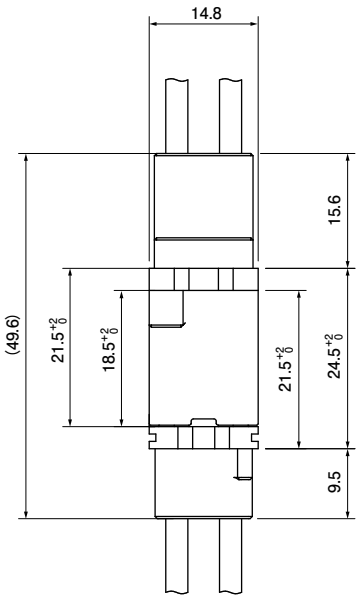



| Model No. | Dimensions | | |
|---|---|---|---|
| | D | E | F |
| 28W0R-RFC-EGD | 38.8 | 29.8 | 23.2 |
| 36W0R-RFC-EGD | 42.8 | 33.8 | 27.2 |
| 44W0R-RFC-EGD | 46.8 | 37.8 | 31.2 |

Note: 1. Drill holes correspond to panel layout dimensions to prevent the formation of burrs, etc.
2. When drilling multiple panel holes adjacent to each other, pay sufficient attention to the strength of the panel.
3. During panel hole fabrication, be sure that the panel insertion direction of the connector is the same as the direction of the drilling process.

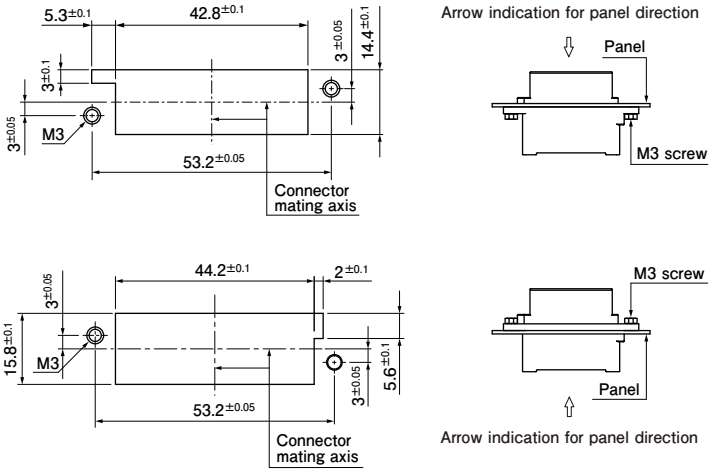
## Assembly layout and Panel layout

### Dual-row
### Power type



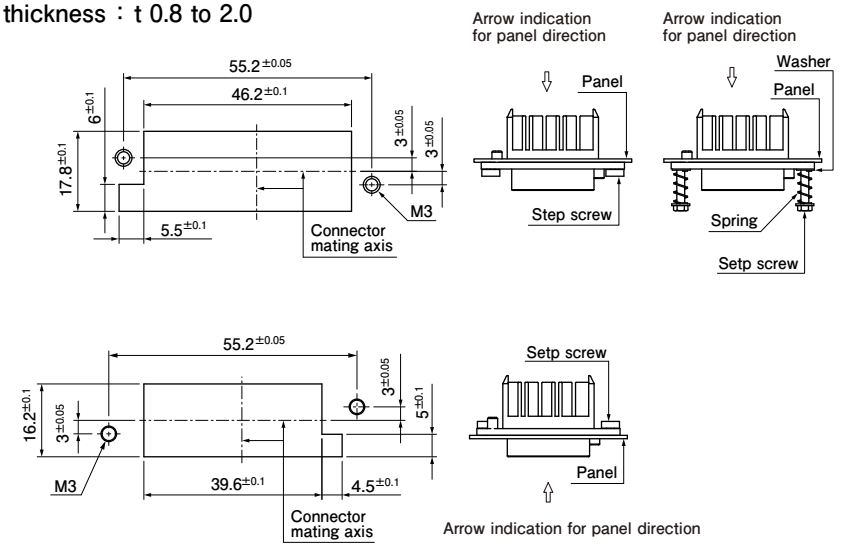

・Plug

Panel thickness：t 0.8 to 2.0




・Receptacle

Panel thickness：t 0.8 to 2.0



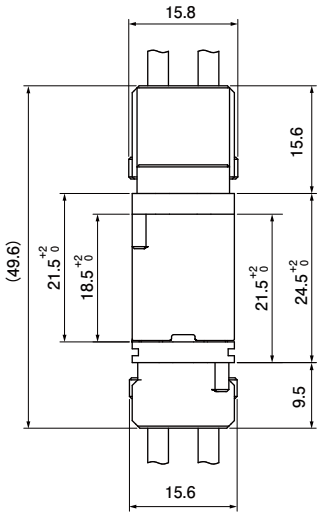

Note: 1. Drill holes correspond to panel layout dimensions to prevent the formation of burrs, etc.
2. When drilling multiple panel holes adjacent to each other, pay sufficient attention to the strength of the panel.
3. During panel hole fabrication, be sure that the panel insertion direction of the connector is the same as the direction of the drilling process.

## Assembly layout and Panel layout

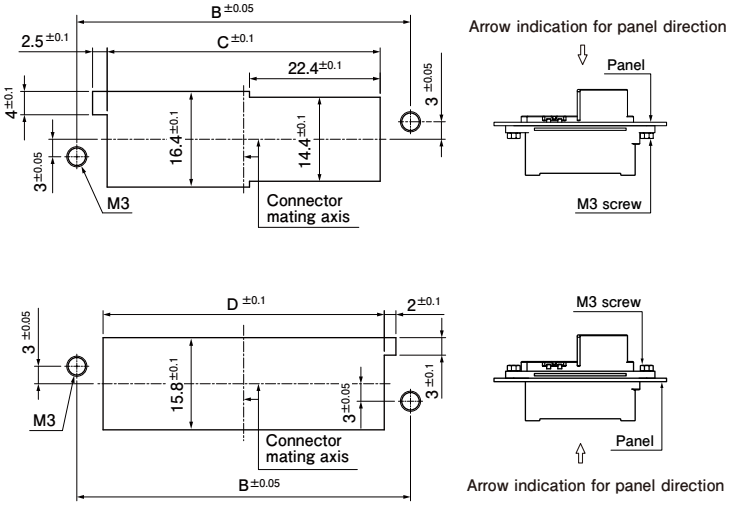
### Dual-row Hybrid type

**・Plug**

Panel thickness：t 0.8 to 2.0



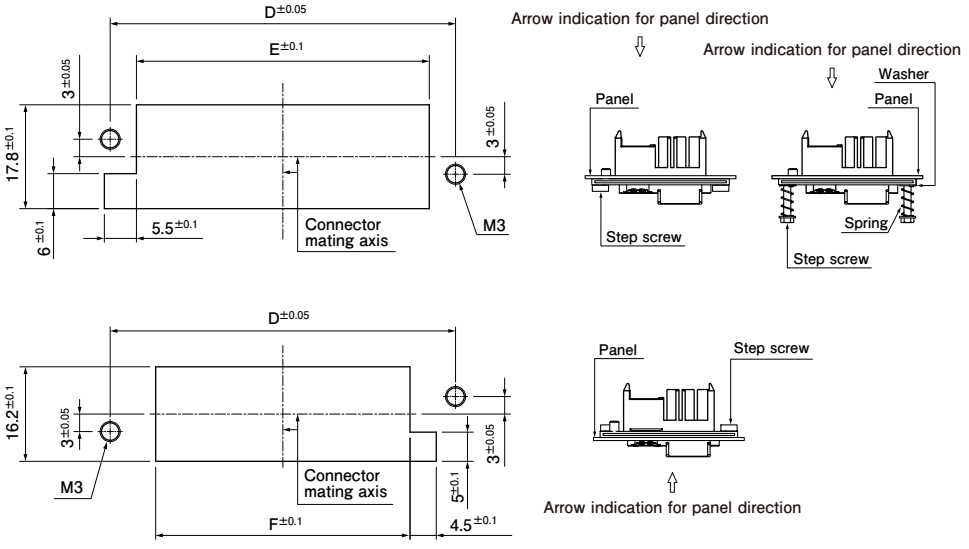

| Model No. | Dimensions | | |
|---|---|---|---|
| | B | C | D |
| RFCP-24W6-E | 57.2 | 46.8 | 48.2 |
| RFCP-36W6-E | 63.2 | 52.8 | 54.2 |




**・Receptacle**

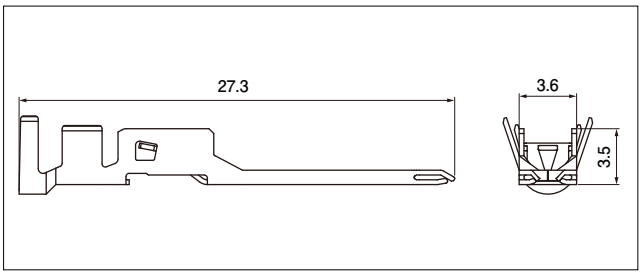
Panel thickness：t 0.8 to 2.0

| Model No. | Dimensions | | |
|---|---|---|---|
| | D | E | F |
| 24W6R-RFC-EGD-1G | 59.2 | 50.2 | 43.6 |
| 36W6R-RFC-EGD-1G | 65.2 | 56.2 | 49.6 |




Note: 1. Drill holes correspond to panel layout dimensions to prevent the formation of burrs, etc.
2. When drilling multiple panel holes adjacent to each other, pay sufficient attention to the strength of the panel.
3. During panel hole fabrication, be sure that the panel insertion direction of the connector is the same as the direction of the drilling process.

## Plug contact for power line




| Model No. | Applicable wire range | | Q'ty/ reel |
|---|---|---|---|
| | Conductor size AWG (mm²) | Insulation O.D. (mm) | |
| SRFM-01GG-S0.9 | #22 to #20 (0.3 to 0.5) | 1.55 to 3.1 | 3,500 |
| SRFM-61GG-S0.9 | #18 to #14 (0.75 to 2.0) | 2.0 to 3.6 | 3,500 |

Material and Surface finish, etc.

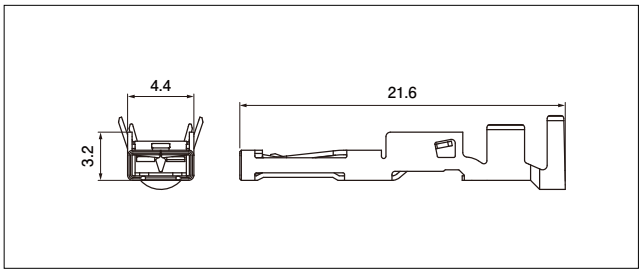
Copper alloy, gold-plated (contact area), tin-plated (crimp)

This product displays (LF)(SN) on a label.

| Contact | Crimping machine | Applicator | Crimp applicator with dies |
|---|---|---|---|
| SRFM-01GG-S0.9 | AP-K2N | MKS-L | APLMK SRFF/M01-09 |
| SRFM-61GG-S0.9 | AP-K2N | MKS-L | APLMK SRFF/M61-09 |

Note: Contact JST for fully automatic crimping applicator.

## Receptacle contact for power line




| Model No. | Applicable wire range | | Q'ty/ reel |
|---|---|---|---|
| | Conductor size AWG (mm²) | Insulation O.D. (mm) | |
| SRFF-01GG-S0.9 | #22 to #20 (0.3 to 0.5) | 1.55 to 3.1 | 3,500 |
| SRFF-61GG-S0.9 | #18 to #14 (0.75 to 2.0) | 2.0 to 3.6 | 3,500 |

Material and Surface finish, etc.

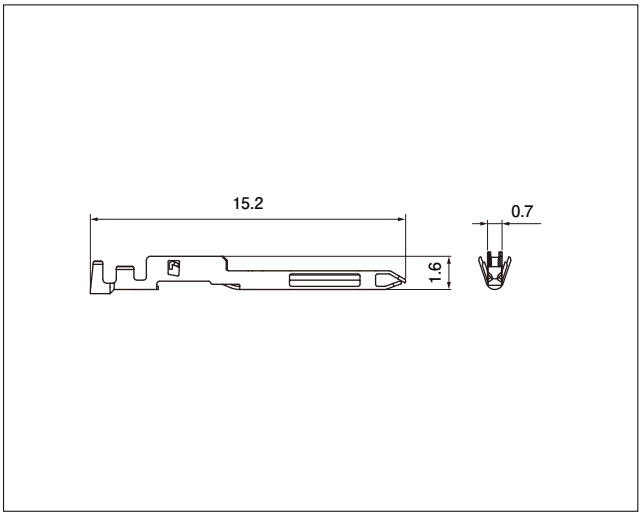
Copper alloy, gold-plated (contact area), tin-plated (crimp)

This product displays (LF)(SN) on a label.

| Contact | Crimping machine | Applicator | Crimp applicator with dies |
|---|---|---|---|
| SRFF-01GG-S0.9 | AP-K2N | MKS-L | APLMK SRFF/M01-09 |
| SRFF-61GG-S0.9 | AP-K2N | MKS-L | APLMK SRFF/M61-09 |

Note: Contact JST for fully automatic crimping applicator.

## Plug contact for signal line




| Model No. | Applicable wire range | | Q'ty/ reel |
|---|---|---|---|
| | Conductor size AWG (mm²) | Insulation O.D. (mm) | |
| SRFCP-002GG-M0.9 | #30 to #26 (0.05 to 0.13) | 0.6 to 0.8 | 18,000 |

Material and Surface finish, etc.

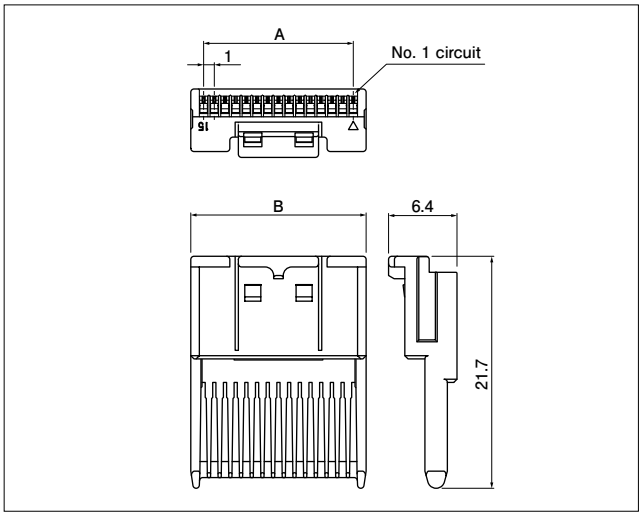
Copper alloy, gold-plated (contact area), tin-plated (crimp)

This product displays (LF)(SN) on a label.

| Contact | Crimping machine | Applicator | Crimp applicator with dies |
|---|---|---|---|
| SRFCP-002GG-M0.9 | AP-K2N | MKS-L-10-3 | APLMK SRFCP002-09 |

Note: Contact JST for fully automatic crimping applicator.

## Plug signal unit



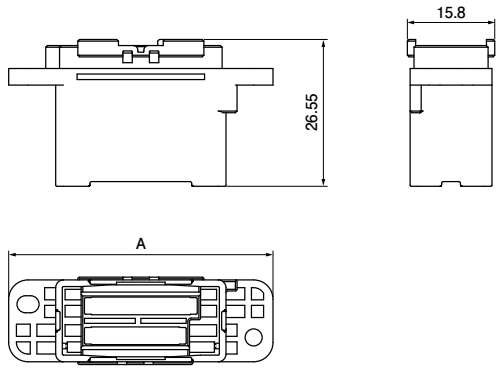

| No. of circuits | Model No. | Dimensions (mm) | | Q'ty/box |
|---|---|---|---|---|
| | | A | B | |
| 11 | RFCYP-11-Z | 10.0 | 12.4 | 7,200 |
| 13 | RFCYP-13-Z | 12.0 | 14.4 | 6,000 |
| 15 | RFCYP-15-Z | 14.0 | 16.4 | 5,200 |
| 17 | RFCYP-17-Z | 16.0 | 18.4 | 4,800 |
| 19 | RFCYP-19-Z | 18.0 | 20.4 | 4,400 |
| 21 | RFCYP-21-Z | 20.0 | 22.4 | 4,000 |
| 23 | RFCYP-23-Z | 22.0 | 24.4 | 3,600 |

Material and Surface finish, etc.

LCP、natural

## Plug housing

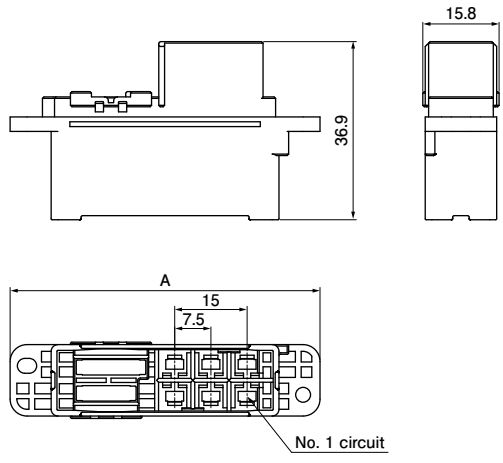
### Dual-row Signal type




| No. of circuits | | Model No. | Dimensions (mm) | Q'ty/box |
|---|---|---|---|---|
| Power | Signal | | A | |
| - | 28 | **RFCP-28W0-E** | 43.8 | 400 |
| - | 36 | **RFCP-36W0-E** | 47.8 | 400 |
| - | 44 | **RFCP-44W0-E** | 51.8 | 350 |

| Material and Surface finish, etc. |
|---|
| PBT (GF), blue |

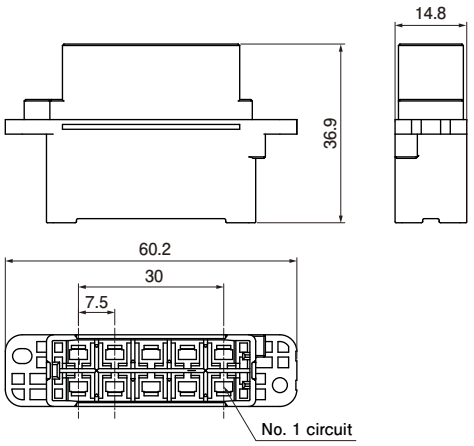
### Dual-row Hybrid type




| No. of circuits | | Model No. | Dimensions (mm) | Q'ty/box |
|---|---|---|---|---|
| Power | Signal | | A | |
| 6 | 24 | **RFCP-24W6-E** | 64.2 | 200 |
| 6 | 36 | **RFCP-36W6-E** | 70.2 | 200 |

| Material and Surface finish, etc. |
|---|
| PBT (GF), blue |

### Dual-row Power type

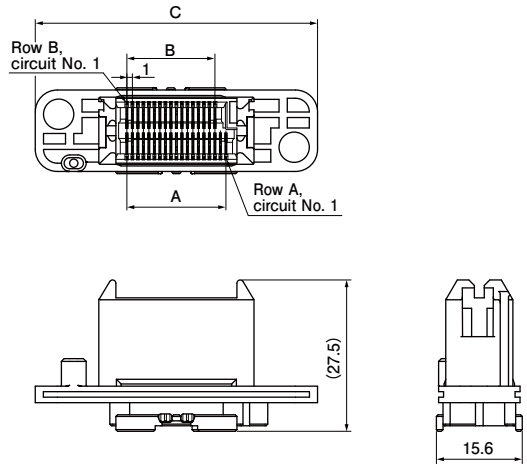



| No. of circuits | | Model No. | Q'ty/box |
|---|---|---|---|
| Power | Signal | | |
| 10 | - | **RFCP-10W-E** | 240 |

| Material and Surface finish, etc. |
|---|
| PBT (GF), blue |

## Receptacle

### Dual-row Signal type

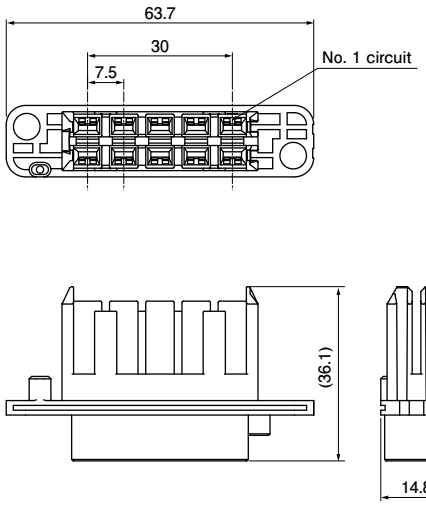



| No. of circuits | | Model No. | Dimensions (mm) | | | Q'ty/box |
|---|---|---|---|---|---|---|
| Power | Signal | | A | B | C | |
| - | 28 | **28W0R-RFC-EGD** | 14.0 | 12.0 | 47.3 | 400 |
| - | 36 | **36W0R-RFC-EGD** | 18.0 | 16.0 | 51.3 | 350 |
| - | 44 | **44W0R-RFC-EGD** | 22.0 | 20.0 | 55.3 | 300 |

| Material and Surface finish, etc. |
|---|
| Signai contact : Copper alloy, gold-plated (mating section), tin-plate (socket section)<br>Housing : PBT (GF), blue |

This product displays (LF)(SN) on a label.

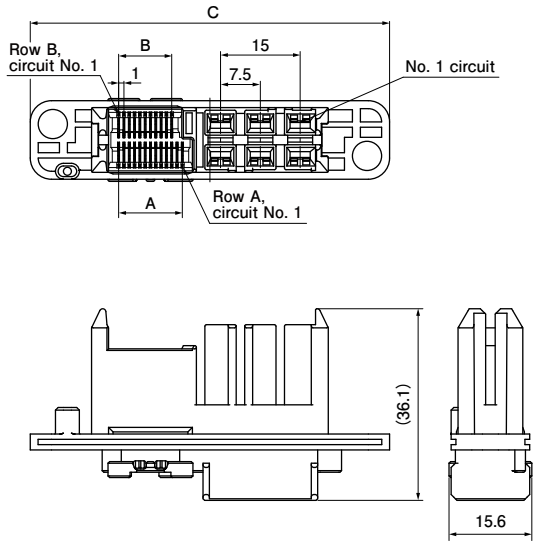
### Dual-row Power type




| No. of circuits | | Model No. | Q'ty/box |
|---|---|---|---|
| Power | Signal | | |
| 10 | - | **RFCR-10W-E-1G** | 240 |

| Material and Surface finish, etc. |
|---|
| PBT (GF), blue |

### Dual-row Hybrid type



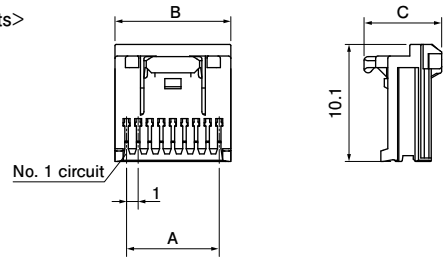

| No. of circuits | | Model No. | Dimensions (mm) | | | Q'ty/box |
|---|---|---|---|---|---|---|
| Power | Signal | | A | B | C | |
| 6 | 24 | **24W6R-RFC-EGD-1G** | 12.0 | 10.0 | 67.7 | 200 |
| 6 | 36 | **36W6R-RFC-EGD-1G** | 18.0 | 16.0 | 73.7 | 160 |

| Material and Surface finish, etc. |
|---|
| Signai contact : Copper alloy, gold-plated (mating section), tin-plate (socket section)<br>Housing : PBT (GF), blue |

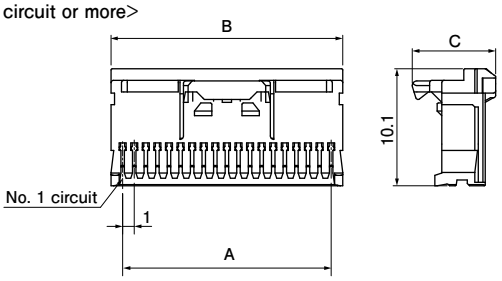
This product displays (LF)(SN) on a label.

## CSR Connector Socket

<11 circuits>



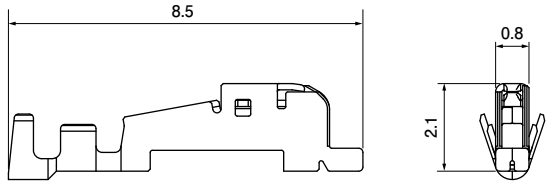

<13 circuit or more>




| No. of circuits | Model No. | Dimensions (mm) | | | Q'ty/box |
|---|---|---|---|---|---|
| | | A | B | C | |
| 11 | **11CSR-8PK** | 10.0 | 12.0 | 6.7 | 4,500 |
| 13 | **13CSR-8PK** | 12.0 | 14.0 | 7.2 | 3,780 |
| 15 | **15CSR-8PK** | 14.0 | 16.0 | 7.2 | 3,240 |
| 17 | **17CSR-8PK** | 16.0 | 18.0 | 7.2 | 2,880 |
| 19 | **19CSR-8PK** | 18.0 | 20.0 | 7.2 | 2,700 |
| 21 | **21CSR-8PK** | 20.0 | 22.0 | 7.2 | 2,340 |
| 23 | **23CSR-8PK** | 22.0 | 24.0 | 7.2 | 2,160 |

| Material and Surface finish, etc. |
|---|
| Contact : Copper alloy, tin-plated<br>Housing : PBT, pink |

## CSH Connector Contact




| Model No. | Applicable wire range | | Q'ty/reel |
|---|---|---|---|
| | Conductor size AWG (mm²) | Insulation O.D. (mm) | |
| **SCSH-002T-P0.2N** | #30 to #26 (0.05 to 0.13) | 0.6 to 0.8 | 12,000 |

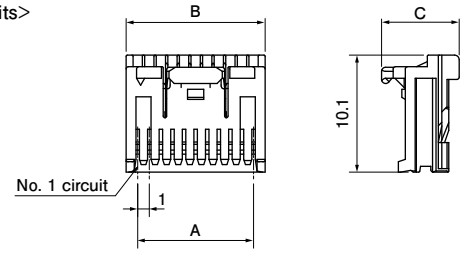
| Material and Surface finish, etc. |
|---|
| Copper alloy, tin-plated |

| Contact | Crimping machine | Applicator | Crimp applicator with dies |
|---|---|---|---|
| SCSH-002T-P0.2N | AP-K2N | MKS-L-10-3 | APLMK SCSH002-02 |

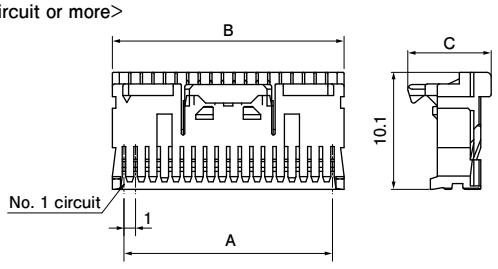
Note: Contact JST for fully automatic crimping applicator.

## CSH Connector Housing

<11 circuits>




<13 circuit or more>




| No. of circuits | Model No. | Dimensions (mm) | | | Q'ty/box |
|---|---|---|---|---|---|
| | | A | B | C | |
| 11 | **CSH-11-PK-N** | 10.0 | 12.0 | 6.7 | 10,000 |
| 13 | **CSH-13-PK-N** | 12.0 | 14.0 | 7.2 | 10,000 |
| 15 | **CSH-15-PK-N** | 14.0 | 16.0 | 7.2 | 10,000 |
| 17 | **CSH-17-PK-N** | 16.0 | 18.0 | 7.2 | 5,000 |
| 19 | **CSH-19-PK-N** | 18.0 | 20.0 | 7.2 | 5,000 |

| Material and Surface finish, etc. |
|---|
| Housing : PBT, pink |