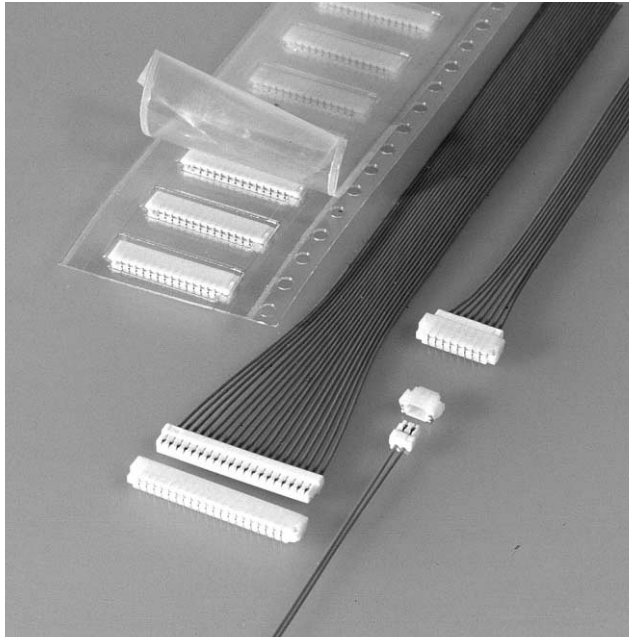


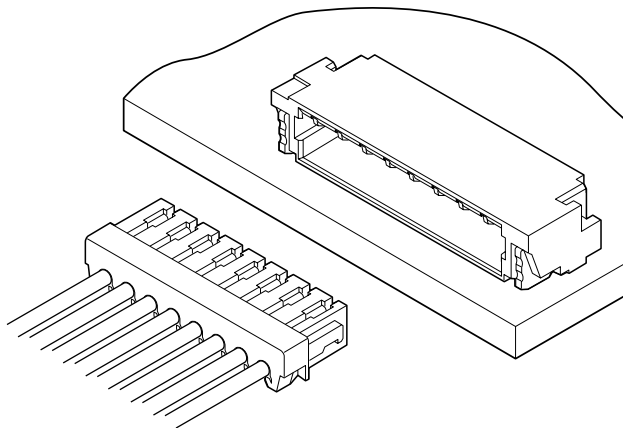
SUR CONNECTOR



Disconnectable Insulation displacement connectors



The world's first 0.8mm (.031") pitch wire-to-board insulation displacement connector. Side entry type is only 3.9mm (.154") depth and 1.75mm (.069") height after mounting on the PC board, and top entry type is only 2.2mm (.087") depth and 3.9mm (.154") height. Compared to the conventional 1.0mm (.039") pitch SSR connector, occupation space on the board is reduced by 34% (side entry type).



Features

• 3-point grip construction

The 3-point insulation grip feature and the strain relief ensure a firm grip on terminated wires and protection of the insulation displacement connection from possible damage.

• Super fine wires are applicable

Applicable wire is of AWG #32 with only 0.38mm (.015") O.D. With this super fine wire, routing of wires is easy.

• Shrouded header

The header is fully shrouded, but remains thin.

• Twin U-slot insulation displacement section

The insulation displacement section connected to each wire consists of two tin-plated slots (twin U-slots), which ensures reliable connection.

Specifications

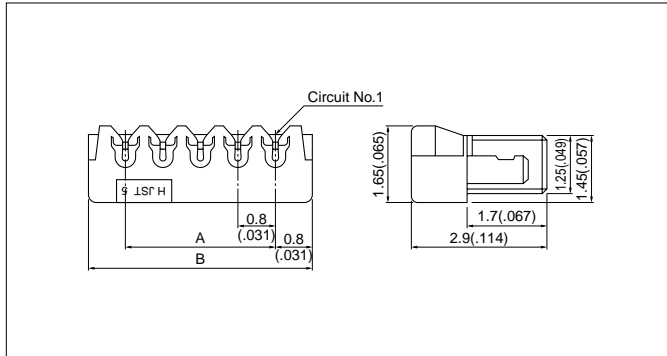
- Current rating: 0.5A AC, DC (AWG #32)
0.2A AC, DC (AWG #36)
- Voltage rating: 30V DC
- Temperature range: -25°C to +85°C (including temperature rise in applying electrical current)
- Contact resistance: Initial value/20m Ω max.
After environmental testing/40m Ω max.
- Insulation resistance: 100M Ω min.
- Withstanding voltage: 200V AC/minute
- Applicable wire: AWG #32, #36
Conductor/7 strands,
tin-coated copper alloy
Insulation O.D./0.39mm (.015")
- * Contact JST if Lead-Free product is required.
- * 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

Receptacle

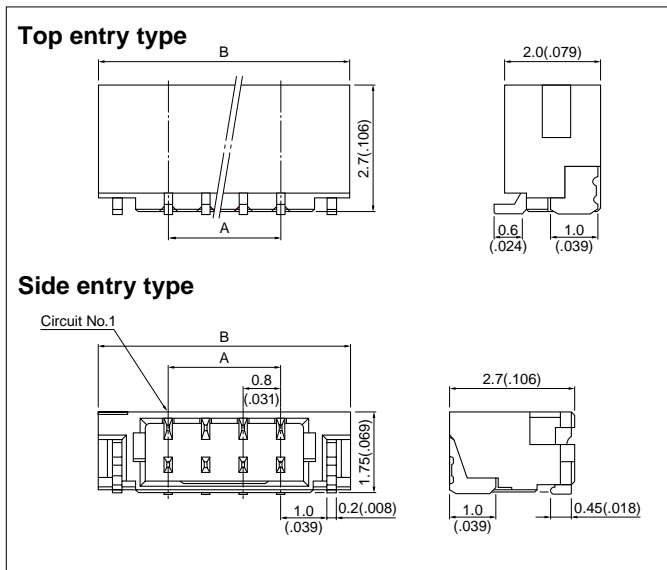


| Circuits | Model No. | | Dimensions mm(in.) | | Q'ty/box |
|----------|--------------|-------------------|--------------------|------------|----------|
| | #32(Natural) | #36(Lemon yellow) | A | B | |
| 2 | 02SUR-32S | 02SUR-36L | 0.8(.031) | 2.4(.094) | 2,000 |
| 3 | 03SUR-32S | 03SUR-36L | 1.6(.063) | 3.2(.126) | 2,000 |
| 4 | 04SUR-32S | 04SUR-36L | 2.4(.094) | 4.0(.157) | 2,000 |
| 5 | 05SUR-32S | 05SUR-36L | 3.2(.126) | 4.8(.189) | 2,000 |
| 6 | 06SUR-32S | 06SUR-36L | 4.0(.157) | 5.6(.220) | 2,000 |
| 8 | 08SUR-32S | 08SUR-36L | 5.6(.220) | 7.2(.283) | 2,000 |
| 10 | 10SUR-32S | 10SUR-36L | 7.2(.283) | 9.6(.378) | 2,000 |
| 12 | 12SUR-32S | 12SUR-36L | 8.8(.346) | 10.4(.409) | 2,000 |
| 14 | 14SUR-32S | 14SUR-36L | 10.4(.409) | 12.0(.472) | 2,000 |
| 15 | 15SUR-32S | 15SUR-36L | 11.2(.441) | 12.8(.504) | 2,000 |
| 16 | 16SUR-32S | 16SUR-36L | 12.0(.472) | 13.6(.535) | 2,000 |
| 17 | 17SUR-32S | 17SUR-36L | 12.8(.504) | 14.4(.567) | 2,000 |
| 20 | 20SUR-32S | 20SUR-36L | 15.2(.598) | 16.8(.661) | 2,000 |
| 22 | 22SUR-32S | 22SUR-36L | 16.8(.661) | 18.4(.724) | 2,000 |

Material and Finish

Contact: Copper alloy, tin-plated
Housing: Polyamide, UL94V-0, natural (ivory)

Shrouded header



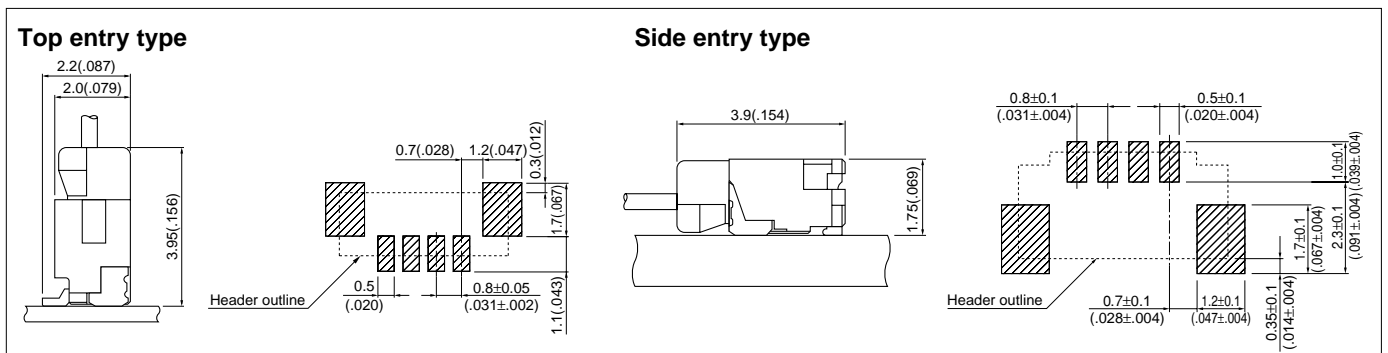
| Circuits | Model No. | | Dimensions mm(in.) | | Q'ty/ reel | |
|----------|----------------|-----------------|--------------------|------------|----------------|-----------------|
| | Top entry type | Side entry type | A | B | Top entry type | Side entry type |
| 2 | BM02B-SURS-TF | SM02B-SURS-TF | 0.8(.031) | 3.8(.150) | 2,500 | 3,500 |
| 3 | — | SM03B-SURS-TF | 1.6(.063) | 4.6(.181) | — | 3,500 |
| 4 | BM04B-SURS-TF | SM04B-SURS-TF | 2.4(.094) | 5.4(.213) | 2,500 | 3,500 |
| 5 | — | SM05B-SURS-TF | 3.2(.126) | 6.2(.244) | — | 3,500 |
| 6 | — | SM06B-SURS-TF | 4.0(.157) | 7.0(.276) | — | 3,500 |
| 8 | — | SM08B-SURS-TF | 5.6(.220) | 8.6(.339) | — | 3,500 |
| 10 | BM10B-SURS-TF | SM10B-SURS-TF | 7.2(.283) | 10.2(.402) | 2,500 | 3,500 |
| 12 | BM12B-SURS-TF | SM12B-SURS-TF | 8.8(.346) | 11.8(.465) | 2,500 | 3,500 |
| 14 | — | SM14B-SURS-TF | 10.4(.409) | 13.4(.528) | — | 3,500 |
| 15 | BM15B-SURS-TF | SM15B-SURS-TF | 11.2(.441) | 14.2(.559) | 2,500 | 3,500 |
| 16 | — | SM16B-SURS-TF | 12.0(.472) | 15.0(.591) | — | 3,500 |
| 17 | — | SM17B-SURS-TF | 12.8(.504) | 15.8(.622) | — | 3,500 |
| 20 | BM20B-SURS-TF | SM20B-SURS-TF | 15.2(.598) | 18.2(.717) | 2,500 | 3,500 |
| 22 | — | SM22B-SURS-TF | 16.8(.661) | 19.8(.780) | — | 3,500 |

Material and Finish

Contact: Copper alloy, copper-undercoated, tin/lead-plated
Wafer: Polyamide, UL94V-0, natural (ivory)
Solder tab: Brass, copper-undercoated, tin/lead-plated

Note: The products listed above are supplied on embossed-tape.

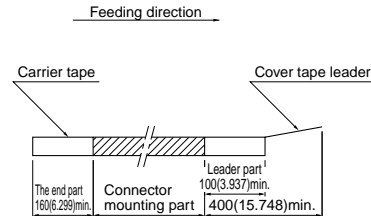
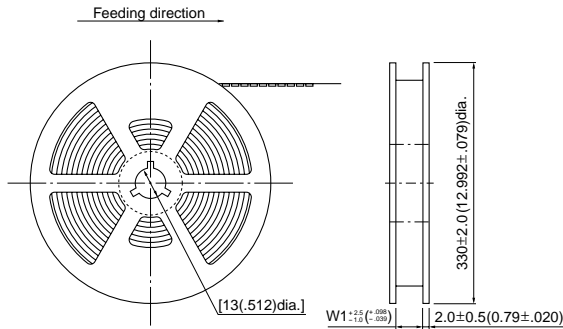
PC board layout (viewed from component side) and Assembly layout



Note: 1. Tolerances are non-cumulative: $\pm 0.05\text{mm} (\pm .002")$ for all centers.
2. Dimensions above should serve as a guideline. Contact JST for details.

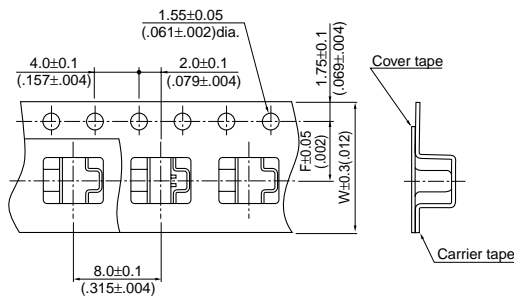
SUR CONNECTOR

Taping specifications

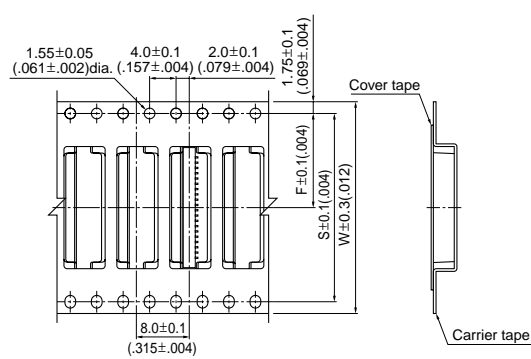


Top entry type

(2 to 15 circuits)

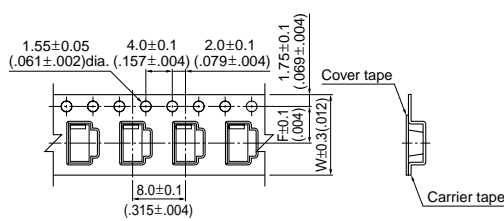


(20 circuits)

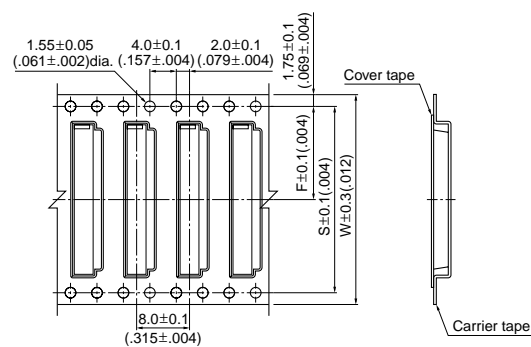


Side entry type

(2 to 17 circuits)



(20, 22 circuits)



| Circuits | Taping dimensions mm(in.) | | | Reel dimensions mm(in.) | | Q'ty / reel | |
|----------|---------------------------|-------------|-------------|-------------------------|----------------|-----------------|--|
| | F | S | W | W1 | Top entry type | Side entry type | |
| 2, 4 | 5.5(.217) | — | 12.0 (.472) | 13.5 (.531) | 2,500 | 3,500 | |
| 5 to 8 | 7.5(.295) | — | 16.0 (.630) | 17.5 (.689) | — | 3,500 | |
| 10 to 17 | 11.5(.453) | — | 24.0 (.945) | 25.5(1.004) | 2,500 | 3,500 | |
| 20, 22 | 14.2(.559) | 28.4(1.118) | 32.0(1.260) | 33.5(1.319) | 2,500 | 3,500 | |

Note:

- Specifications conform to JIS C 0806. The tape width, connector recess hole dimensions, etc. are determined by the number of circuits and external shape of the connector to be loaded.
- Specifications are subject to change without prior notice.