

The Slimline Range offers a low profile connector system that is well suited for circuit board applications. The precision machined contacts are ideal for power and sensitive signals. All Snap Together - Slimline connectors are RoHS Compliant.



### Applications:

- Junction Boxes.
- Communications equipment.
- Test equipment.
- Instrumentation.

### Product Features

- Less than 10,00 (.393) width on PC board.
- Pin headers pre-loaded with straight or 90° machined solder tail pins.
- Mating plug accepts all Trident signal crimp socket contacts, see page 64.
- Plugs have integrally molded quick connect/disconnect latches.
- Five single row contact arrangements available.
- Recognized under the component program of UL Inc.
- Gold plated version available with earth pin capability.
- 10 A per circuit.



### Performance Specifications

|                                     |  |
|-------------------------------------|--|
| Operating Voltage <sup>1</sup>      | Up to 250 V ac rms   |
| Contact Current Rating <sup>2</sup> | Up to 10 A   |
| Operating Temperature               | -55°C to +105°C (-67°F to +221°F) for free Plug & Receptacles<br>-40°C to +105°C (-40°F to +221°F) for PCB Mounted Receptacles |
| Insulation Resistance               | 5000MΩ min. at 500 V dc  |
| Durability <sup>3</sup>             | Up to 500 Mating Cycles  |
| Connector Latching Force            | 150 N min. with latches engaged  |
| Panel Retention Force               | 500 N min.   |
| Flammability                        | UL 94 V-0  |

### Materials and Finishes

**Insulator** Black Nylon, UL 94 V-0

<sup>1</sup> Depends on contacts used, layout, and degree of pollution

<sup>2</sup> Depends on number and type of contacts used

<sup>3</sup> Depends on plating and type of contacts used

### Test Specifications

The table below summarizes the results of key tests. Data is applicable to standard connectors with standard contacts. Variations may affect this data, so please consult factory for further information on your requirements.

| Test   | Method  | Criteria of Acceptance                              |
|--|---|---|
| Dielectric Withstanding Voltage  | 2000 V ac   | No breakdown  |
| Thermal Shock  | -55°C to +125°C (-67°F to +257°F), 5 cycles                     | No physical damage                                  |
| Physical Shock   | 50 g's peak, 3 axes,<br>11 millisecond duration half-sine pulse | No physical damage.<br>No loss of continuity >1 sec |
| Vibration  | 10 g's peak,<br>10-500 Hz, 9 hours                              | No physical damage,<br>No loss of continuity >1 sec |
| Durability 500 cycles of mating and unmating,<br>500 mating cycles max | No mechanical or<br>electrical defects                          |   |
| Salt Spray   | 48 hours<br>and meet contact resistance requirements            | Shall be capable of mating and unmating             |
| High Temperature Endurance   | 1000 hours at 125°C (+257°F)                                    | Insulation Resistance > 100 MW                      |
| Humid Steady State   | RH 90-95%, 40°C (+125°F), 504 hours                             | Insulation Resistance > 100 MW                      |
| Moisture Resistance  | 10 Cycles   | Insulation Resistance > 100 MW                      |



## How to Order

Typical Nomenclature: TST 03 P F 0 0 \*

**Series**

TST = Trident Snap Together

**Number of Contacts**

- 03
- 04
- 06
- 09
- 10

**Plating Style**

- \* = None (Plug only)
- T = Tin
- Y = 0,4 μm Gold overall
- Z = Gold Flash

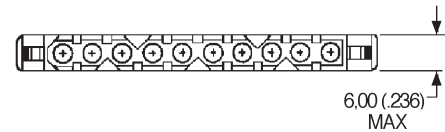
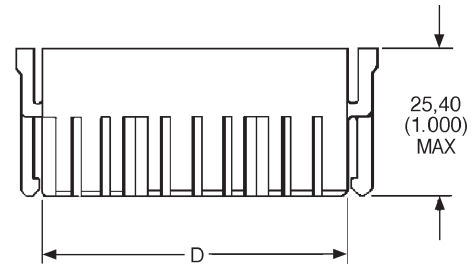
**Contact Type**

- 0 = No Contacts (Standard for Plug and Panel Mounted Receptacle)
- 1 = Machined Solder Tail Pin
- 2 = Machined Solder Tail Socket
- 5 = Formed Stamped Solder Tail Pin
- 6 = Formed Stamped Solder tail Socket

**Color of Moulding**

- 0 = Black

| Variant |                                   |
|---------|-----------------------------------|
| RD      | PCB Receptacle; Straight Contacts |
| RE      | PCB Receptacle; 90° Contacts      |
| PF      | Plug                              |



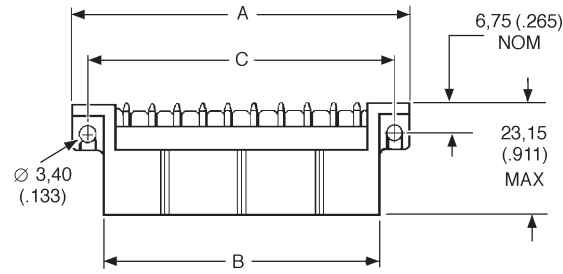
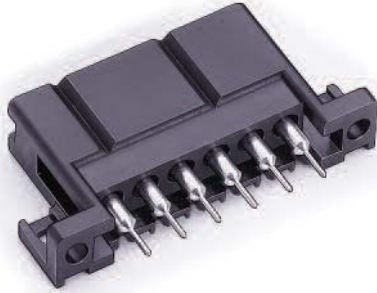
## Plug Connector

- Socket contacts must be ordered separately for the plug connectors, see page 64.

## Part Numbers — Plug Connector

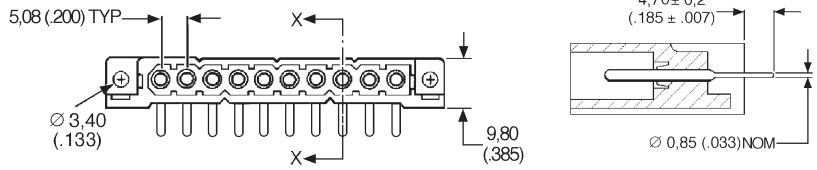
| Number of Contacts | Pack of 100 |              | D max.        |
|--------------------|-------------|--------------|---------------|
|                    | Part Number | Nomenclature |               |
| 3                  | 192990-0960 | TST03PF00    | 16,10 (.633)  |
| 4                  | 192990-0970 | TST04PF00    | 21,20 (.834)  |
| 6                  | 192990-0980 | TST06PF00    | 31,40 (1.236) |
| 9                  | 192990-0990 | TST09PF00    | 46,60 (1.834) |
| 10                 | 192990-1000 | TST10PF00    | 51,60 (2.031) |

Dimensions shown in mm (inch)  
Specifications and dimensions subject to change



## Receptacle for Straight Pin Contact

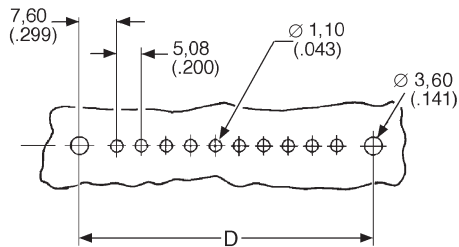
- For gold plated versions extended earth pins are available in any one or two positions. Contact your local Cannon Sales Office for further details.



### Pack of 100

| Number of Contacts | Gold Plated Version<br>0,4µm (16µin.) min. Gold |              | Tin Plated Version |              | Dimensions (max.) |               |               |
|--------------------|---|--------------|--------------------|--------------|-------------------|---------------|---------------|
|                    | Part Number                                     | Nomenclature | Part Number        | Nomenclature | A                 | B             | C             |
| 3                  | 192991-0337                                     | TST03RD01Y   | 192991-0316        | TST03RD01T   | 31,40 (1.236)     | 19,40 (.763)  | 25,50 (1.003) |
| 4                  | 192991-0347                                     | TST04RD01Y   | 192991-0318        | TST04RD01T   | 36,50 (1.437)     | 14,50 (.964)  | 30,60 (1.204) |
| 6                  | 192991-0342                                     | TST06RD01Y   | 192991-0320        | TST06RD01T   | 46,70 (1.838)     | 34,70 (1.366) | 40,70 (1.602) |
| 9                  | 192991-0536                                     | TST09RD01Y   | 192991-0322        | TST09RD01T   | 61,90 (2.437)     | 49,90 (1.964) | 56,00 (2.204) |
| 10                 | 192991-0354                                     | TST10RD01Y   | 192991-0324        | TST10RD01T   | 67,00 (2.637)     | 55,00 (2.165) | 61,10 (2.405) |

## PCB Layout

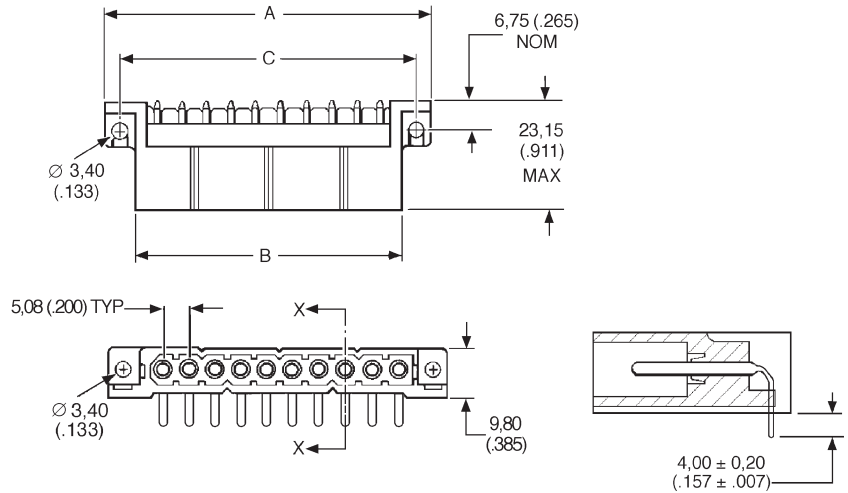


| Number of Contacts | D max.        |
|--------------------|---------------|
| 3                  | 25,50 (1.003) |
| 4                  | 30,60 (1.204) |
| 6                  | 40,70 (1.602) |
| 9                  | 56,00 (2.204) |
| 10                 | 61,10 (2.405) |



### Receptacle for 90° Pin Contacts

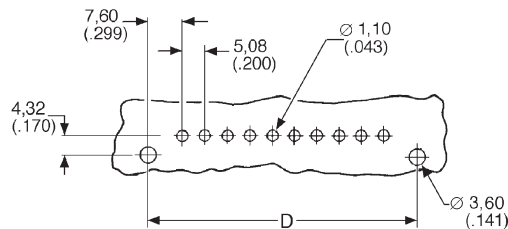
- For gold plated versions extended earth pins are available in any one or two positions. Contact your local Cannon Sales Office for further details.



### Pack of 100

| Number of Contacts | Gold Plated Version<br>0,4 $\mu\text{m}$ (16 $\mu\text{in.}$ ) min. Gold |              | Tin Plated Version |              | Dimensions (max.) |               |               |
|--------------------|--|--------------|--------------------|--------------|-------------------|---------------|---------------|
|                    | Part Number  | Nomenclature | Part Number        | Nomenclature | A                 | B             | C             |
| 3                  | 192991-0532  | TST03RE01Y   | 192991-0317        | TST03RE01T   | 31,40 (1.236)     | 19,40 (.763)  | 25,50 (1.003) |
| 4                  | 192991-0533  | TST04RE01Y   | 192991-0319        | TST04RE01T   | 36,50 (1.437)     | 14,50 (.964)  | 30,60 (1.204) |
| 6                  | 192991-0534  | TST06RE01Y   | 192991-0321        | TST06RE01T   | 46,70 (1.838)     | 34,70 (1.366) | 40,70 (1.602) |
| 9                  | 192991-0535  | TST09RE01Y   | 192991-0323        | TST09RE01T   | 61,90 (2.437)     | 49,90 (1.964) | 56,00 (2.204) |
| 10                 | 192991-0538  | TST10RE01Y   | 192991-0325        | TST10RE01T   | 67,00 (2.637)     | 55,00 (2.165) | 61,10 (2.405) |

### PCB Layout



| Number of Contacts | D max.        |
|--------------------|---------------|
| 3                  | 25,50 (1.003) |
| 4                  | 30,60 (1.204) |
| 6                  | 40,70 (1.602) |
| 9                  | 56,00 (2.204) |
| 10                 | 61,10 (2.405) |

Dimensions shown in mm (inch)  
Specifications and dimensions subject to change