

# Cannon Trident Connectors

Snap Together - Rectangular

These are low installed cost connectors rated for up to 13 A and 240 V ac. They are typically used for circuit board and internal wiring applications. Snap Together connectors facilitate easy assembly and removal of equipment such as motors, fans, transformers, etc. All Snap Together - Rectangular connectors are RoHS Compliant.



勝特力材料 886-3-5753170  
胜特力电子(上海) 86-21-54151736  
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[Http://www.100y.com.tw](http://www.100y.com.tw)



## Applications:

- Vehicle Dashboards.
- Circuit board connections.
- Internal connections.

## Product Features

- Easy cost effective installation.
- Integrally molded latches and connector polarization.
- Recognized under the component program of UL Inc.
- Inter-connector discrimination facilities available.
- Accepts formed (stamped) or machined contacts, see page 64.



## Performance Specifications

Operating Voltage <sup>1</sup>	Up to 250 V ac rms
Contact Current Rating <sup>2</sup>	Up to 13 A
Operating Temperature	-55°C to +105°C (-67°F to +221°F) for free Plug and Receptacles -40°C to +105°C (-40°F to +221°F) for PCB Mounted Receptacles
Insulation Resistance	5000M $\Omega$ 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

<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

## Materials and Finishes

Insulator	Black Nylon, UL 94 V-0
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# Cannon Trident Connectors

Snap Together - Rectangular

## How to Order

Typical Nomenclature:

TST 02 P A 0 0 \*

Series

TST = Trident Snap Together

Number of Contacts

02  
03  
04  
06  
12  
24  
36

Plating Style

T = Tin  
Y = Gold  
Z = Gold Flash  
\* = None (no contacts)

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



Type	
PA	Plug; Free
RB	Receptacle; For PCB, with Mounting Lugs
RA	Receptacle; Panel Mounting (delivered without any contacts)
RR	Receptacle, For PCB, 90° Right Angle Mounting (only for 12 position connectors with machined contacts)
AS	Accessory; Receptacle Shroud
AH	Accessory; Plug Strain Relief Hood

## 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, 11 millisecond duration half-sine pulse	No physical damage. No loss of continuity >1 sec
Vibration	10 g's peak, 10-500 Hz, 9 hours	No physical damage, No loss of continuity >1 sec
Durability	500 cycles of mating and unmating, 500 mating cycles max	No mechanical or electrical defects
Salt Spray	48 hours	Shall be capable of mating and unmating and meet contact resistance requirements
High Temperature Endurance	1000 hours at 125°C (+257°F)	Insulation Resistance > 100 MΩ
Humidity Steady State	RH 90-95%, 40°C (+104°F), 504 hours	Insulation Resistance > 100 MΩ
Moisture Resistance	10 Cycles	Insulation Resistance > 100 MΩ



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

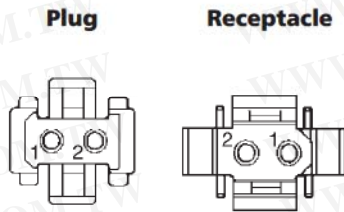
www.ittcannon.com



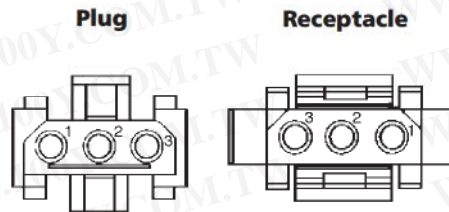


### Contact Cavity Arrangements — Mating Face View

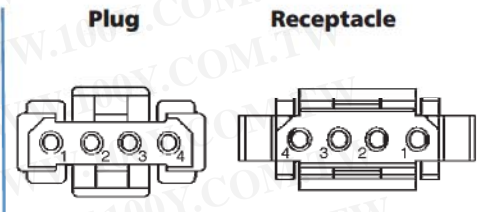
2-way



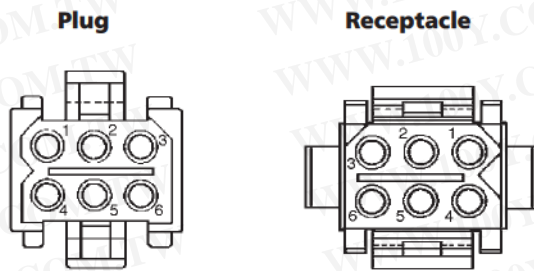
3-way



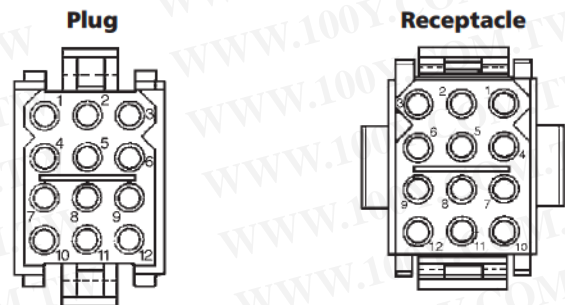
4-way



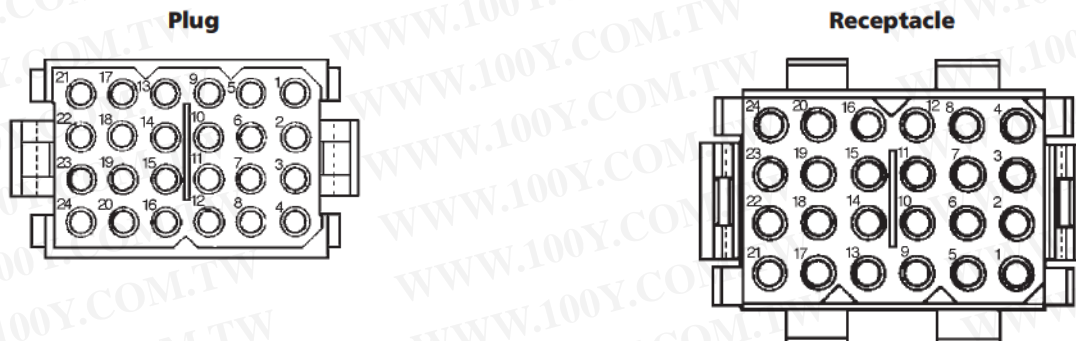
6-way



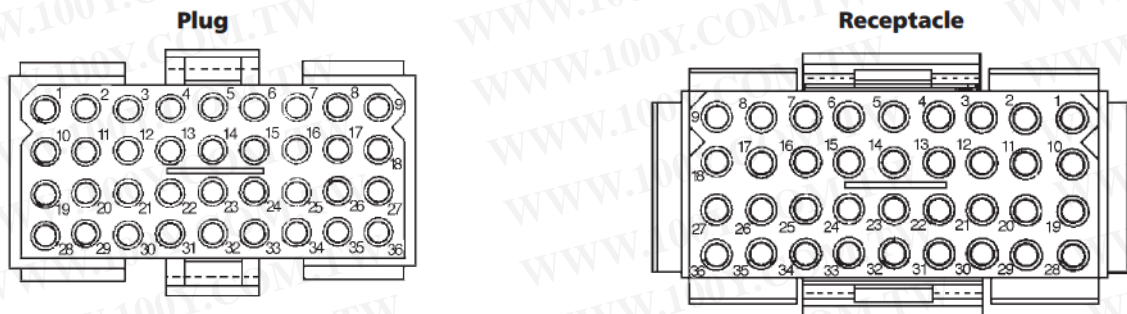
12-way

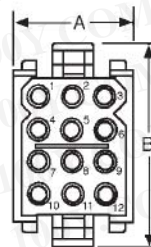
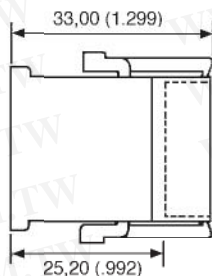


24-way



36-way





### Free Plug

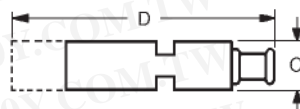
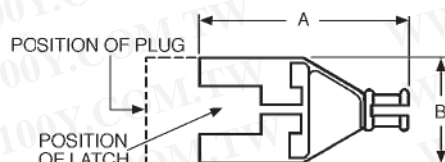
- Accepts Pin or Socket contacts.
- Contacts to be ordered separately, see page 64.
- Mates with panel mounted receptacles, see page 11.
- Mates with PCB mounted receptacles, see pages 12-13.
- Connector Discriminating (Keying) Pins available, see page 73.

Number of Contacts	Pack of 100		Dimensions (max.)	
	Part Number	Nomenclature	A	B
2	192990-0350	TST02PA00	15,50 (.610)	17,00 (.669)
3	192923-5920	TST03PA00	19,00 (.748)	17,00 (.669)
4	192990-0370	TST04PA00	24,00 (.944)	17,00 (.669)
6	192923-5930	TST06PA00	19,00 (.748)	22,00 (.866)
12	192923-5940	TST12PA00	19,00 (.748)	32,00 (1.259)
24	192923-5950	TST24PA00	24,00 (.944)	42,00 (1.653)
36	192923-5960	TST36PA00	49,50 (1.948)	32,00 (1.259)



### Accessory — Plug Strain Relief Hood

- Provides strain relief and wire protection.
- Secure with a tie-wrap (customer supplies tie-wrap).



Number of Contacts	Pack of 100		Wire Bundle Dia.	Dimensions (max.)			
	Part Number	Nomenclature		A	B	C	D
2	192990-0460	TST02AH00	2,30-8,30 (.090-.326)	46,20 (1.818)	16,10 (.633)	11,00 (.433)	56,50 (2.224)
3	192990-0470	TST03AH00	2,30-8,30 (.090-.326)	46,20 (1.818)	18,60 (.732)	11,00 (.433)	56,50 (2.224)
4	192990-0480	TST04AH00	3,00-10,00 (.118-.393)	46,20 (1.818)	23,70 (.933)	11,00 (.433)	56,50 (2.224)
6	192923-5970	TST06AH00	2,30-8,30 (.090-.326)	46,20 (1.818)	19,00 (.748)	16,40 (.645)	56,50 (2.224)
12	192923-5980	TST12AH00	3,00-10,00 (.118-.393)	45,50 (1.791)	19,00 (.748)	26,40 (1.039)	55,80 (2.196)
24	192923-5990	TST24AH00	4,60-12,70 (.181-.500)	51,00 (2.007)	24,10 (.948)	36,80 (1.448)	60,30 (2.374)
36	192923-6000	TST36AH00	7,00-15,90 (.275-.625)	57,50 (2.263)	49,50 (1.948)	26,40 (1.039)	68,00 (2.677)



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