
ITT Cannon’s innovative Combo-D with High Efficiency Power (HEP) Contacts feature canted coil spring technology that increases electrical current carrying capacity, improves efficiency and reduces costs.

Combo-D with HEP Contacts is the latest addition to the ITT Cannon Combination D-Subminiature product line. Engineered for use in a variety of markets and applications—from ordnance and military transports to shipboard radar and satellite systems—these versatile interconnect solutions help transmit more power in an increasingly connected world.

The Cannon Difference
• One of the first high power contacts with canted coil spring technology
• Offers up to 75% increase in electrical current carrying capacity over conventional high-power contacts
• Among the smallest, high performance designs available
• Offers exceptional versatility and use in a wide range of markets & applications

Key Features
• Lower mating force enables easy, quick and convenient component connection and disconnection
• Innovative canted coil spring technology increases the 40A electrical current rating in a standard size 8 contact to a range of 65A to 70A, representing as much as a 75% increase
• Available in crimp, solder, PCB (straight, right angle) terminations
• HEP Contacts can be used in any Cannon brand or competitors’ Combo-D connector
• Industry standard size 8 cavity can be retrofitted
• Must be used as a mated pair

Markets & Applications

Military Vehicles
Satellite Systems
Shipboard Systems
Shipboard Radar
Combo-D with HEP Contacts

How to Order | Part Number Configurator

Product Family Designator

D*M = Industrial & Space/Non-Magnetic Applications (Solder Cup, Straight & 90° PCB)
Shell Sizes = E, A, B, C, D
Flash & 30 microinch gold over nickel contacts

D*MM = Military/Hi-Rel, 50 microinch gold plating (Solder Cup, Straight & 90° PCB)

D*A = Crimp

Shell Sizes = E, A, B, C, D

Hardware Modifier

blank = .120” (3.05mm) Through Hole
C = 90° Metal Bracket, #4-40 Fastener and Boardlock
D = 90° Metal Bracket, #4-40 Fastener and #4-40 Screwlock
E = #4-40 Clinchnut
G = 90° Metal Bracket, #4-40 Fastener, #4-40 Screwlock, Boardlock
H = .300” (7.6mm) #4-40 Standoff, #4-40 Screwlock
J = 90° Metal Bracket, M3 Fastener, M3 Screwlock, Boardlock
K = .162” (4.11mm) Through Hole
L = 90° Metal Bracket, M3 Fastener, Boardlock
N = .300” (7.6mm) #4-40 Standoff, #4-40 Screwlock, Boardlock
Q = 90° Metal Bracket, M3 Fastener, M3 Screwlock
P = 90° Metal Bracket, #4-40 Fastener
Q = .300” (7.6 mm) M3 standoff, Boardlock
S = 90° Metal Bracket, M3 Fastener
T = .300” (7.6 mm) M3 standoff
U = .300” (7.6 mm) M3 Standoff, M3 Screwlock and Boardlock
V = .300” (7.6 mm) #4-40 Standoff
W = .300” (7.6mm) M3 Standoff, M3 Screwlock
X = M3 Clinchnut
Y = Dual Float Mounts
Z = .300” (7.6mm) #4-40 Standoff, Boardlock

Shell Material and Plating Modification Code

blank = Carbon steel, Yellow chrome over zinc shells
Flash gold over nickel contacts
A101 = Carbon steel, Yellow chrome over cadmium
A197 = Carbon steel, Pure Tin over Nickel (socket side only) RoHS
K87 = Carbon steel, Pure Tin over Nickel (pin shell with grounding dimples) RoHS
F225 = Stainless steel, Passivated RoHS
NMBK52 = Brass, gold over copper (non-magnetic for space applications)

Contact Termination Code

blank = Solder cup (D*M/D*MM)
Crimp (D*A)
J = 90° PCB signal contact, (ø.030” × .170” long)
N = Straight PCB signal contact, (ø.030” × .178” long)
V = 90° PCB signal contact, (ø.024” × .157” long)
Y = Straight PCB signal contact, (ø.024” × .178” long)

Contact Gender

P = Pin/Male (plug)
S = Socket/Female (receptacle)

Layout (Example: 5W1- Total number of 5 contacts with 1 size 8 cavity)
Shell Size E: 2W2, 2WK2, * 5W1
Shell Size A: 3W3, 3WK3, * 7W1, 11W1
Shell Size B: 5W5, 9W4, 13W3, 17W2, 21W1
Shell Size C: 8W8, 13W6, 17W5, 21W4, 25W3, 27W2
Shell Size D: 24W7, 36W4, 43W2, 47W1

Why ITT

ITT is a focused, multi-industrial company that designs and manufactures highly engineered critical components and customized technology solutions. ITT Cannon is a leading global manufacturer of connector products serving international customers in the aerospace and defense, industrial and medical end markets. We design and engineer a variety of interconnect solutions that make it possible to transfer data, signal and power in an increasingly connected world.

Connect with your ITT Cannon representative today or visit www.ittcannon.com

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