

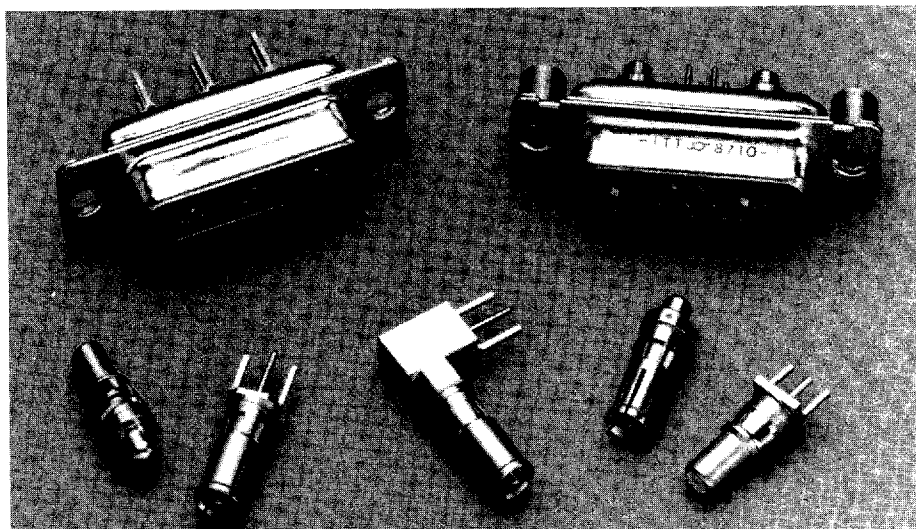
Combo D®

Combination D Subminiature connectors are the fastest growing segment of the D Subminiature market. ITT Cannon engineering teams, in keeping pace with the demands of the industry, have developed the broadest selection of combination D Subminiatures available.

We offer the ability to integrate signal and coax, high power, and high voltage. You can mix red, green, and blue video lines with signal and up to 40 amps of power in the same package.

Design variations of the new Combo D connector, versus other packaging methods, include the proven ITT Cannon polarized "D" shape to prevent mis-mating; dense, space-saving packaging; and diverse mounting options. Choose from a variety of cable and printed wiring board selections. Printed wiring board combos come pre-assembled with fixed contacts eliminating the need to buy several components.

This new line of connectors offers you **unlimited design versatility**.



Straight and right angle printed wiring board contacts are available in both coax and high power versions.

Performance and Material Specifications

CONNECTOR ASSEMBLIES

Description	Material	Finish
Shell	Steel or Brass	Yellow Chromate over Cadmium or Gold over Nickel
Insulator	Thermoplastic or Diallyl Phthalate, UL 94V-0 rated.	None
Size 20 contacts when applicable	Copper alloy	50μ inches gold over copper or 100μ inches gold over copper.
Bracket	Steel	Yellow Chromate over Cadmium.
Rivnut	Steel or Copper alloy	

COAXIAL ASSEMBLY

Contacts and shells	Copper alloy	Gold over nickel or 50μ inches gold over copper.
Ring, retaining	Copper alloy	Nickel or Gold
Insulator	Teflon	None

U.L. File Number: E8572

DIELECTRIC WITHSTANDING VOLTAGE

Type of Contact		Altitude (feet/m)							
		Sea Level		20,000/6096		50,000/15240		70,000/1336	
		90°	Straight	90°	Straight	90°	Straight	90°	Straight
Center Conductor to Coaxial Shell	Average Flashover	1200	1500	900	1000	600	700	400	500
	Test	800	1000	600	650	400	475	275	325
Coaxial Shell to Nearest Standard Solder Pot Contact	Average Flashover	•	1500	•	1500	•	900	•	650
	Test	•	1000	•	1000	•	600	•	425
High Power contact and/or Coaxial Shell to Plug Shell	Average Flashover	1500	1500	1000	1000	500	500	500	500
	Test	1000	1000	650	650	325	325	325	325
#20 Signal	Average Flashover	1700		1000		650		500	
	Test	1250		750		475		375	
HV Contact to Nearest Contact or to Shell	Average Flashover	3800	3800	2300	2300	900	900	650	650
	Test	2800	2800	1700	1700	675	675	475	475

All voltage figures are rms AC 60 rms cps, measured at approximately +25°C, 50% rh.

Impedance: 50 ohm

PERFORMANCE DATA

Signal Contact Current Rating	5 Amp
Temperature Rating	-65°C to +150°C
Signal Contact Resistance millivolt max.	55 @ 7.5 Amp test current
Coax Impedance	50 ohm
Coax VSWR	Less than 1.3-1.0 up to 500 megahertz
Coax Insertion Loss	.1 db loss at 500 megahertz.

See *Commercial D Subminiature* catalog for additional Combo D options, including 75 ohm Coax.

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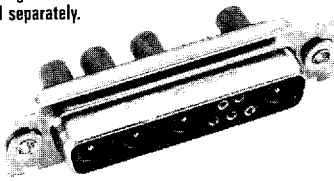
For technical assistance, price or delivery information, call your local technical sales office or distributor.

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Combo D® – High Voltage

Coaxial Housings With Solder Cup Signal Contacts

High voltage contacts supplied separately.



Contact Arrangements: Page 346 of Coax section
Performance Specifications: Page 345 of Coax section.

Clinch Nut and Float Mount Options Available:

Add: E = 4-40 Clinch Nut

Y = Float Mounting

Example: DAMME3W3P

DAMMY3W3P

Mounting Method Detail – Page 334.

Cable Combinations supplied with preloaded solder signal contacts. High Voltage Contacts supplied separately, see below.

Extraction Tool for High Voltage Contacts are the same as for 50 Ohm Coaxial Contacts. See page 348.

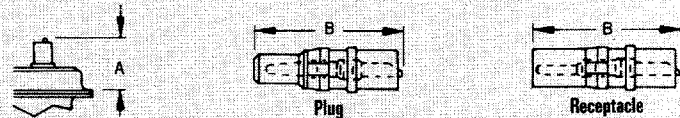
Layout	Military Socket	Military Pin
DE-5W1	DEM5W1S	DEM5W1P
DA-7W2	DAM7W2S	DAM7W2P
DA-11W1	DAM11W1S	DAM11W1P
DA-3W3	DAM3W3S	DAM3W3P
DB-5W5	DBM5W5S	DBM5W5P
DB-9W4	DBM9W4S	DBM9W4P
DB-13W3	DBM13W3S	DBM13W3P
DB-17W2	DBM17W2S	DBM17W2P
DB-21W1	DBM21W1S	DBM21W1P
DC-8W8	DCM8W8S	DCM8W8P
DC-13W6	DCM13W6S	DCM13W6P
DC-17W5	DCM17W5S	DCM17W5P
DC-21WA4	DCM21WA4S	DCM21WA4P
DC-25W3	DCM25W3S	DCM25W3P
DC-27W2	DCM27W2S	DCM27W2P
DD-24W7	DCM24W7S	DCM24W7P
DD-36W4	DCM36W4S	DCM36W4P
DD-43W2	DCM43W2S	DCM43W2P
DD-47W1	DCM47W1S	DCM47W1P

High Voltage Combination Contacts

Wire Accommodation (AWG)	#20 Max.
Current Rating	5 Amp
Temperature Rating	-55°C to +125°C

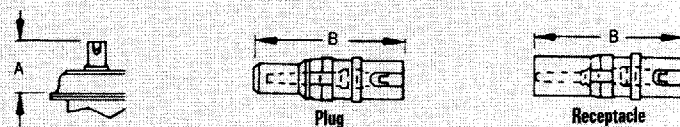
Description	Material	Finish
Contacts	Copper Alloy	Std: Gold over nickel MIL: 50µ in. Gold over copper
Insulator	Thermoplastic	None
Ring, Retaining	Copper Alloy	Nickel

Straight



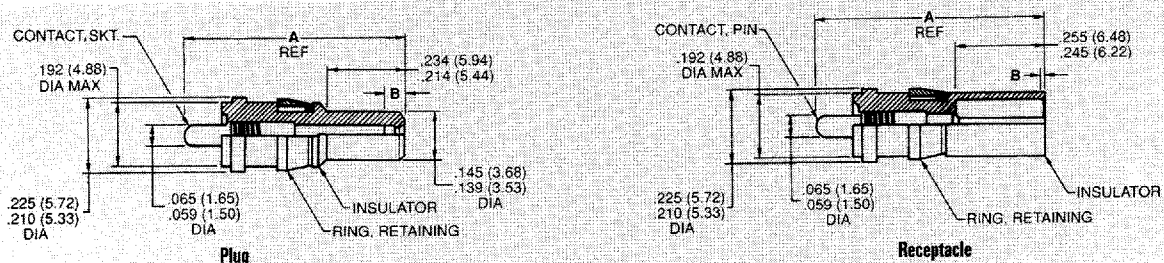
	Gold over Nickel	50µ in. Gold	A Max.	B Ref.	Wire Size
Plug	DM51157	DM51157-8	.539 (13.69)	.734 (18.64)	#20
Receptacle	DM51155	DM51155-7	.539 (13.69)	.764 (19.41)	#20

Right Angle



	Gold over Nickel	50µ in. Gold	A Max.	B Ref.	Wire Size
Plug	DM51157-5000	DM51157-5005	.491 (12.47)	.697 (17.70)	#20
Receptacle	DM51155-5000	DM51155-5004	.491 (12.47)	.697 (17.70)	#20

Straight PCB



	Standard Finish	Military Finish	A	B
Plug	DM51157-13	DM51157-14	.628 (15.95)	.060 / .050 (1.52 / 1.27)
Receptacle	DM51155-12	DM51155-13	.660 (16.76)	.010 / .000 (0.25 / 0.00)

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Dimensions are shown in inches (millimeters).
Dimensions subject to change.