

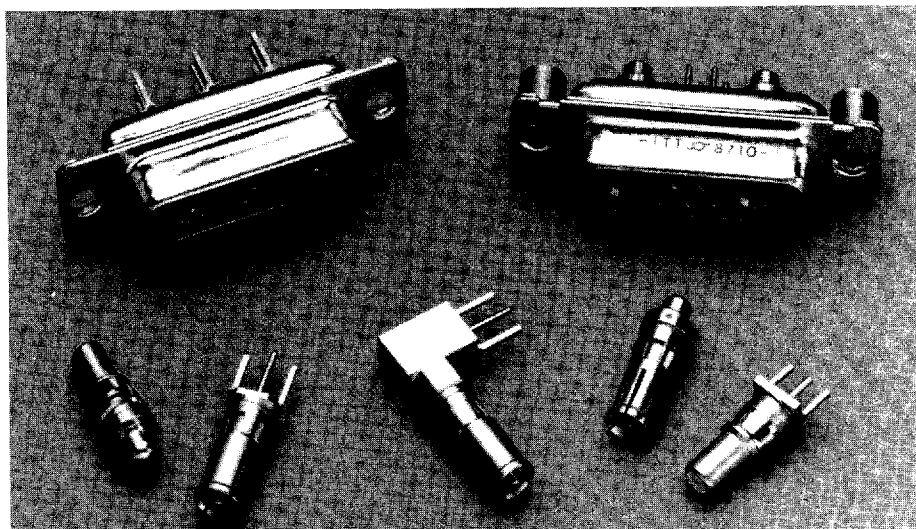
Combo D®

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.

ITT Cannon

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

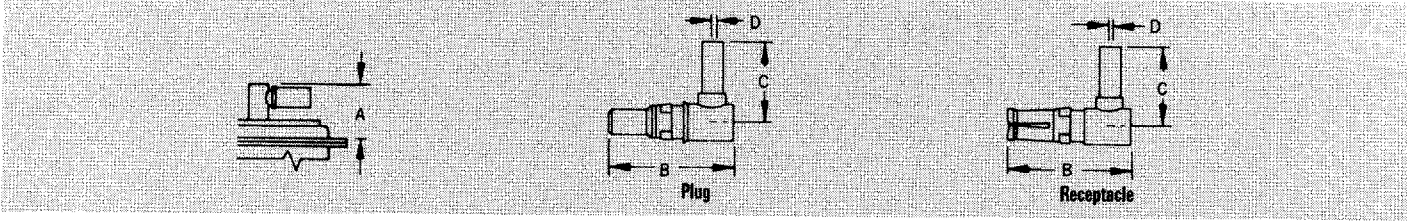
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Combo D[®] – Coaxial/50 Ohm

Cable Combinations – 50 Ohm Coaxial Contacts (Continued)

Right Angle Crimp Braid

(Dimensions include outer sleeve)
Color Code: Receptacle - Blue; Plug - Red



	Part Number	A	B	C	D	RG Cable No.		
	Gold Over Nickel	50μ in. Gold Over Copper	Max.	Ref.		±.005 (0.13)	Old	New
Plug	DM53741	DM53741-12	.530 (13.46)	.745 (18.92)	.594 (15.10)	.045 (1.14)	196/U	178B/U
Plug	DM53741-1	DM53741-11	.530 (13.46)	.745 (18.92)	.594 (15.10)	.072 (1.83)	187/U	179B/U
							188/U	316B/U
Plug	DM53741-3	DM53741-10	.530 (13.46)	.745 (18.92)	.630 (16.00)	.110 (2.79)	195/U	180B/U
Plug	DM53741-4	DM53741-13	.530 (13.46)	.745 (18.92)	.630 (16.00)	.125 (3.18)	58/U	58B/U
Receptacle	DM53743-2	DM53743-18	.530 (13.46)	.745 (18.92)	.594 (15.10)	.045 (1.14)	196/U	178B/U
Receptacle	DM53743-3	DM53743-16	.530 (13.46)	.745 (18.92)	.594 (15.10)	.072 (1.83)	187/U	179B/U
							188/U	316B/U
Receptacle	DM53743-5	DM53743-17	.530 (13.46)	.745 (18.92)	.630 (16.00)	.110 (2.79)	195/U	180B/U
Receptacle	DM53743-6	DM53743-19	.530 (13.46)	.745 (18.92)	.630 (16.00)	.125 (3.18)	58/U	58B/U

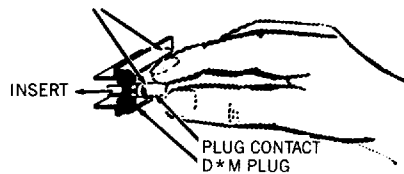
Insertion/Extraction Instructions

Coaxial, High Power and High Voltage Contacts

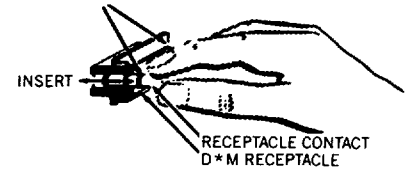
Insertion

No insertion tool is required. The contact is easily snapped in from the rear of the connector.

RED COLOR CODED CONNECTOR ACCEPTS PLUG CONTACTS.



BLUE COLOR CODED CONNECTORS ACCEPTS RECEPTACLE CONTACTS. INSERT FROM TERMINAL END AS SHOWN BELOW.



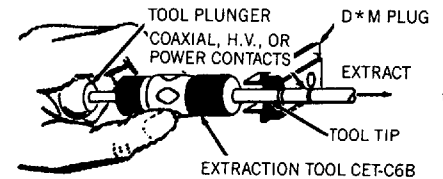
Extraction

CET-C6B

The CET-C6B tool extracts coaxial, high power and high voltage contacts (plug and receptacle). Part number 070064-0000.

Operating Instructions:

To extract the coax contact, hold the tool by the body and insert the tip into the front of the contact cavity until it bottoms and closes the coax retaining ring. Holding the body in this position securely enough to keep coax retaining ring closed, push the plunger; contact will be pushed out of the rear of the assembly.



Hand Tool with integral die set for all coax straight crimp braid. Part Number: 070051-0000 (CCT-DM)

D Subminiature Connectors

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

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