

Micro-D Metal Shell - .050" Contact Spacing

MDM



Cannon MDM Series Microminiature Connectors are used in applications requiring highly reliable, extremely small and lightweight solutions with higher density contact configurations. They are available in eight shell sizes that accommodate from 9 to 100 contacts, as well as special arrangements with power and coaxial contacts. Cannon MDM Series Microminiature Connectors employ size 24 Micro-Pin / Micro-Socket Contacts on .050 (1.27) centers in a contact density identical to the standard Micro-D connector series, but with Aluminum shells to increase strength, prevent chipping, cracking or breaking and provide electromagnetic (EMI and RFI) shielding. They also feature a silicone elastomer compression interfacial seal to provide a moisture and humidity seal between each contact and between the contacts and shell.

Specifications

Standard Materials and Finishes	
Shell	- 6061-T6 Aluminum alloy per QQ-A-200/8, yellow chromate/cadmium, Type II, Class 3 over electroless nickel per SAE AMS-C-26074, Class 4.
Insulator	- Liquid Crystal Polymer per MIL-M-24519, Type GLCP-30F (9-100) - Glass filled diallyl phthalate per MIL-M-14, Type SDGF (7*2 and 24*4) - Polyphenylene sulfide per MIL-M-24519, Type GST-40F (16*5) - Polyester per MIL-M-24519, Type GPT-30F (10*10)
Contacts	- Copper alloy, gold plate
Mounting Hardware	- 300 Series stainless steel, passivated
Kit, Jackpost (3) items	- 300 Series stainless steel, passivated
Washer	- 400 Series stainless steel, passivated
Standard Epoxy	- Hysol EE4215/HD3561, color black - Hysol EE4198/HD3561, color green - Hysol MG40FS molding compound

Mechanical Features	
Coupling	- Friction/jackscrews
Polarization	- Keystone-shaped shells
Contact Spacing Centers	- .050 (1.27)
Shell Styles	- Plug and receptacle
No. of Contacts	9 thru 100 signal; 5 signal/2 coaxial; 5 signal/2 power; 11 signal/5 coaxial; 11 signal/5 power; 0 signal/10 coaxial; 0 signal/10 power; 20 signal/4 coaxial; 20 signal/4 power
Coaxial Cable	- RG - 178/U
Wire Size	- #24 thru #32 AWG
Contact Termination	- Multiple indent crimp

Performance Data

Test	Method	Criteria of Acceptance
Dielectric Withstanding Voltage	Method 3001: 600 VAC at sea level 150 VAC at 70,00' altitude	No breakdown No breakdown
Insulation Resistance	Method 3003	5,000 megohms minimum
Thermal Shock	Method 1003. Condition A: - 55°C to +125°C	No physical damage
Physical Shock	Method 2004, Condition E: 50 G's, 3 axes, 6 millisecond duration sawtooth pulse	No physical damage No loss of continuity > 1 μsec
Vibration	Method 2005, Condition IV: 20 G's, 10-20,000 Hz. 12 hrs	No physical damage No loss of continuity > 1 μsec
Durability	500 cycles of mating and unmating, 500 CPH max.	No mechanical or electrical defects
Moisture Resistance	Method 1002, Type II, omit steps 7a & 7b	Insulation resistance > 100 megohms
Salt Spray	Method 1001, Condition B: 48 hours	Shall be capable of mating and unmating, and meet contact resistance requirements
Contact Resistance (MIL-STD-202)	Method 1001, Condition B: At 3 amps At 1 milliamp	8 milliohms maximum 10 milliohms maximum
Contact Retention	Per MIL-DTL-83513	5 lb. minimum axial load



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

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