Assuring 100% reliability in over 5,000 missile launches to our armed forces and global allies.
MDM connectors are used in applications requiring highly reliable, extremely small, lightweight connectors with higher density contact configurations than available in traditional rectangular connectors. They are available in 8 shell sizes accommodating from 9 to 100 contacts, and special arrangements of power and coaxial contacts. These connectors are designed to meet the rapidly increasing demands for an environmental, high performance, rugged, moisture-sealed microminiature connector. This connector employs size 24 MICROPIN™/MICROSOCKET™ contacts on .050 (1.27) centers in a contact density identical to the standard MICRO-D connector series, but with these additional features:

- Aluminum shells to provide greater strength, prevent chipping, cracking or breaking, offer electromagnetic (EMI) and RFI shielding.
- Silicone elastomer compression interfacial seal to provide a moisture and humidity seal between each contact and between 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-26574, Class 4.
  - Liquid Crystal Polymer per MIL-M-24519, Type GLCP-30F (6-100)
- **Insulator**
  - Glass filled diallyl phthalate per MIL-M-14, Type SDGF (7'2 and 2'4)
  - Polyphenylene sulfide per MIL-M-24519, Type GST-40F (16'S)
  - Polyester per MIL-M-24519, Type GPT-30F (10'10)
- **Contacts**
  - Copper alloy, gold plate
- **Mounting Hardware**
  - #20 series stainless steel, passivate
  - 300 Series stainless steel, passivate
  - 400 Series stainless steel, passivate
- **Washer**
  - 400 Series stainless steel, passivate
- **Standard Epoxy**
  - Hysol EE4215/HD3561, color black
  - Hysol EE4198/HD3561, color green

**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
- **Contact Termination**
  - Plug and receptacle

### Performance Data

The table below summarizes the results of key tests performed in accordance with MIL-STD-1344, where applicable. Data is applicable to standard connectors with standard termination. Variations may affect this data, so please consult customer service for further information on your requirements.

<table>
<thead>
<tr>
<th>Test</th>
<th>Method</th>
<th>Criteria of Acceptance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dielectric Withstanding Voltage</td>
<td>Method 3001: 600 VAC at sea level</td>
<td>No breakdown</td>
</tr>
<tr>
<td></td>
<td>150 VAC at 70,000’ altitude</td>
<td>No breakdown</td>
</tr>
<tr>
<td>Insulation Resistance</td>
<td>Method 3003</td>
<td>5,000 megohms minimum</td>
</tr>
<tr>
<td>Thermal Shock</td>
<td>Method 1003, Condition A: -55°C to +125°C</td>
<td>No physical damage</td>
</tr>
<tr>
<td>Physical Shock</td>
<td>Method 2004, Condition E: 50 G’s, 3 axes, 6 millisecond duration sawtooth pulse</td>
<td>No physical damage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No loss of continuity &gt; 1 µsec</td>
</tr>
<tr>
<td>Vibration</td>
<td>Method 2005, Condition IV: 20 G’s, 10-2,000 Hz, 12 hrs</td>
<td>No physical damage</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No loss of continuity &gt; 1 µsec</td>
</tr>
<tr>
<td>Durability</td>
<td>500 cycles of mating and unmating, 500 CPH max.</td>
<td>No mechanical or electrical defects</td>
</tr>
<tr>
<td>Moisture Resistance</td>
<td>Method 1002, Type II, omit steps 7a &amp; 7b</td>
<td>Insulation resistance &gt; 100 megohms</td>
</tr>
<tr>
<td>Salt Spray</td>
<td>Method 1001, Condition B: 48 hours</td>
<td>Shall be capable of mating and unmating, and meet contact resistance requirements</td>
</tr>
<tr>
<td>Contact Resistance (MIL-STD-202)</td>
<td>Method 1001, Condition B: At 3 amps, At 1 milliamp</td>
<td>8 milliohms maximum</td>
</tr>
<tr>
<td></td>
<td>Method 1001, Condition B:</td>
<td>10 milliohms maximum</td>
</tr>
<tr>
<td>Contact Retention</td>
<td>Per MIL-DTL-83513</td>
<td>5 lb. minimum axial load</td>
</tr>
</tbody>
</table>

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

www.ittcannon.com
Micro-D Metal Shell - .050" Contact Spacing
MDM

How to Order

For MIL-DTL-83513 ordering information see pages D-15 and D-16.

<table>
<thead>
<tr>
<th>SERIES</th>
<th>CONTACT ARRANGEMENTS</th>
<th>TERMINATION TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM: (Size 9-100) Liquid Crystal Polymer (LCP)</td>
<td>H - Harness-insulated wire.</td>
<td>(H) 001 - 18&quot;, 7/34 strand, #26 AWG, MIL-W-16878/4, Type E Teflon, yellow.</td>
</tr>
<tr>
<td>MDM: (Combo Layout) Diallyl Phthalate (DAP)</td>
<td>L - Solid-uninsulated wire.</td>
<td>(H) 003 - 18&quot;, 7/34 strand, #26 AWG, MIL-W-16878/4, Type E Teflon, color coded to MIL-STD-681 System I.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CONTACT TYPE</th>
<th>TERMINATION CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>P - Pin</td>
<td>(H) 001 - 18&quot;, 7/34 strand, #26 AWG, MIL-W-16878/4, Type E Teflon, yellow.</td>
</tr>
<tr>
<td>S - Socket</td>
<td>(H) 003 - 18&quot;, 7/34 strand, #26 AWG, MIL-W-16878/4, Type E Teflon, color coded to MIL-STD-681 System I.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HARDWARE MOD CODES</th>
<th>SHELL FINISH MOD CODES</th>
</tr>
</thead>
<tbody>
<tr>
<td>M - Military specification hardware, see page B-11 for military hardware codes.</td>
<td>(L) 1 - 1/2&quot; uninsulated solid #25 AWG gold plated copper.</td>
</tr>
<tr>
<td>P - Jackpost</td>
<td>(L) 2 - 1&quot; uninsulated solid #25 AWG gold plated copper.</td>
</tr>
<tr>
<td>K - Jackscrew-standard profile</td>
<td>SHELL FINISH MOD CODES</td>
</tr>
<tr>
<td>L - Jackscrew-low profile</td>
<td>No Number - (Standard cadmium/yellow chrome over nickel</td>
</tr>
<tr>
<td>F - Float mount</td>
<td>A174 - Electroless nickel</td>
</tr>
<tr>
<td>B - No hardware standard</td>
<td>A172 - Gold over nickel</td>
</tr>
<tr>
<td>.091 (2.31) dia. hole for sizes 9-51; .120 (3.05) dia. hole for size 100.</td>
<td>A141 - Iridite/alodine</td>
</tr>
<tr>
<td>.125 (3.18) dia. mounting holes for sizes 9-51; .166 (4.22) dia. hole for size 100.</td>
<td>A30 - Black anodize</td>
</tr>
<tr>
<td>B1 - .1475 (3.75) dia. hole for size 100 (Per MIL-DTL-83513)</td>
<td>*See page D.8 for a list of standard termination codes.</td>
</tr>
</tbody>
</table>

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

www.ittcannon.com
**COTS or Non Mil-Spec or Commercial or Industrial Standard Wire Termination Codes**

Cannon Termination Code (Not MS)

The following termination codes are listed for your information. For additional codes please refer to Appendix on page D-98 to D-102. All wire lengths are minimum.

<table>
<thead>
<tr>
<th>Harness Type</th>
<th>Contact</th>
<th>Type 1</th>
<th>Type 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>H020</td>
<td>H027</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H019</td>
<td>H016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H026</td>
<td>H034</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H029</td>
<td>H028</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H001</td>
<td>H003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H038</td>
<td>H009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H010</td>
<td>H011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H013</td>
<td>H041</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H017</td>
<td>H048</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H042</td>
<td>H041</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Cavity #1 black

### Contact Arrangements

(Face View of Pin Insert - Use Reverse Order for Socket Side)

#### Standard

- **9 Contacts**
- **15 Contacts**
- **25 Contacts**
- **31 Contacts**
- **37 Contacts**
- **51 Contacts**
- **100 Contacts**

Contact identification numbers are for reference only and do not appear on insulator or connector body.

#### Coaxial

- **Size 51 Shell**
  - 11 Micro contact
  - 5 Coax or 5 Power

- **Size 25 Shell**
  - 5 Micro contact
  - 2 Coax or 2 Power

- **Size 100 Shell**
  - 0 Micro contact
  - 10 Coax or 10 Power

Dimensions shown in inches (mm)

Specifications and dimensions subject to change

www.ittcannon.com
Micro-D Metal Shell - .050" Contact Spacing

MDM

COTS or Non Mil-Spec or Commercial or Industrial Shell Dimensions (Conforms to MIL-DTL-83513)

**Specifications and dimensions subject to change**

Part Number

By Shell Size

<table>
<thead>
<tr>
<th>A Max.</th>
<th>B Max.</th>
<th>C Max.</th>
<th>D Max.</th>
<th>E Max.</th>
<th>+ .005</th>
<th>G Max.</th>
<th>Average Weights** oz. (gm.) ±5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDM-9P*</td>
<td>0.785 (19.94)</td>
<td>0.334 (8.48)</td>
<td>0.400 (10.16)</td>
<td>0.270 (6.86)</td>
<td>0.308 (7.82)</td>
<td>0.565 (14.35)</td>
<td>1.85 (47.0)</td>
</tr>
<tr>
<td>MDM-9S*</td>
<td>0.785 (19.94)</td>
<td>0.402 (10.21)</td>
<td>0.400 (10.16)</td>
<td>0.270 (6.86)</td>
<td>0.308 (7.82)</td>
<td>0.565 (14.35)</td>
<td>1.85 (47.0)</td>
</tr>
<tr>
<td>MDM-15P*</td>
<td>0.935 (23.75)</td>
<td>0.484 (12.29)</td>
<td>0.550 (13.97)</td>
<td>0.270 (6.86)</td>
<td>0.308 (7.82)</td>
<td>0.715 (18.16)</td>
<td>1.85 (47.0)</td>
</tr>
<tr>
<td>MDM-15S*</td>
<td>0.935 (23.75)</td>
<td>0.552 (13.97)</td>
<td>0.550 (13.97)</td>
<td>0.270 (6.86)</td>
<td>0.308 (7.82)</td>
<td>0.715 (18.16)</td>
<td>1.85 (47.0)</td>
</tr>
<tr>
<td>MDM-21P*</td>
<td>1.085 (27.56)</td>
<td>0.634 (16.10)</td>
<td>0.700 (17.78)</td>
<td>0.270 (6.86)</td>
<td>0.308 (7.82)</td>
<td>0.865 (21.97)</td>
<td>1.85 (47.0)</td>
</tr>
<tr>
<td>MDM-21S*</td>
<td>1.085 (27.56)</td>
<td>0.702 (17.78)</td>
<td>0.700 (17.78)</td>
<td>0.270 (6.86)</td>
<td>0.308 (7.82)</td>
<td>0.865 (21.97)</td>
<td>1.85 (47.0)</td>
</tr>
<tr>
<td>MDM-25P*</td>
<td>1.185 (30.10)</td>
<td>0.734 (18.64)</td>
<td>0.800 (20.32)</td>
<td>0.270 (6.86)</td>
<td>0.308 (7.82)</td>
<td>0.965 (24.51)</td>
<td>2.53 (64.3)</td>
</tr>
<tr>
<td>MDM-25S*</td>
<td>1.185 (30.10)</td>
<td>0.802 (20.32)</td>
<td>0.800 (20.32)</td>
<td>0.270 (6.86)</td>
<td>0.308 (7.82)</td>
<td>0.965 (24.51)</td>
<td>2.53 (64.3)</td>
</tr>
<tr>
<td>MDM-31P*</td>
<td>1.335 (33.91)</td>
<td>0.884 (22.45)</td>
<td>0.950 (24.13)</td>
<td>0.270 (6.86)</td>
<td>0.308 (7.82)</td>
<td>1.115 (28.32)</td>
<td>2.53 (64.3)</td>
</tr>
<tr>
<td>MDM-31S*</td>
<td>1.335 (33.91)</td>
<td>0.952 (24.18)</td>
<td>0.950 (24.13)</td>
<td>0.270 (6.86)</td>
<td>0.308 (7.82)</td>
<td>1.115 (28.32)</td>
<td>2.53 (64.3)</td>
</tr>
<tr>
<td>MDM-37P*</td>
<td>1.485 (37.72)</td>
<td>1.034 (26.26)</td>
<td>1.100 (27.94)</td>
<td>0.270 (6.86)</td>
<td>0.308 (7.82)</td>
<td>1.265 (32.13)</td>
<td>2.53 (64.3)</td>
</tr>
<tr>
<td>MDM-37S*</td>
<td>1.485 (37.72)</td>
<td>1.102 (27.94)</td>
<td>1.100 (27.94)</td>
<td>0.270 (6.86)</td>
<td>0.308 (7.82)</td>
<td>1.265 (32.13)</td>
<td>2.53 (64.3)</td>
</tr>
<tr>
<td>MDM-51P*</td>
<td>1.435 (36.45)</td>
<td>0.984 (24.99)</td>
<td>1.050 (26.67)</td>
<td>0.310 (7.87)</td>
<td>0.351 (8.92)</td>
<td>1.215 (30.86)</td>
<td>2.28 (59.7)</td>
</tr>
<tr>
<td>MDM-51S*</td>
<td>1.435 (36.45)</td>
<td>1.052 (26.72)</td>
<td>1.050 (26.67)</td>
<td>0.310 (7.87)</td>
<td>0.351 (8.92)</td>
<td>1.215 (30.86)</td>
<td>2.28 (59.7)</td>
</tr>
<tr>
<td>MDM-100P*</td>
<td>2.170 (55.12)</td>
<td>1.384 (35.15)</td>
<td>1.442 (36.63)</td>
<td>0.360 (9.14)</td>
<td>0.394 (10.10)</td>
<td>1.800 (45.72)</td>
<td>2.71 (68.8)</td>
</tr>
<tr>
<td>MDM-100S*</td>
<td>2.170 (55.12)</td>
<td>1.508 (38.10)</td>
<td>1.442 (36.63)</td>
<td>0.360 (9.14)</td>
<td>0.394 (10.10)</td>
<td>1.800 (45.72)</td>
<td>2.71 (68.8)</td>
</tr>
</tbody>
</table>

Add lead type and length; see How To Order. ***Weight given is 1/2", uninsulated, solid, #25 AWG gold plated copper pigtails.

Panel Mounting Dimensions (Sizes 9 - 100)

Plug and Receptacle

Rear Mounted

Plug and Receptacle

Front Mounted

Plug Front Mounted

Receptacle Rear Mounted

Dimensions shown in inches (mm)

Specifications and dimensions subject to change

www.ittcannon.com
### Panel Cutouts

**NOTE:** See page B-13 for rear panel mounting configuration.

Shell Sizes 9 thru 51

#### Front Mounting

<table>
<thead>
<tr>
<th>Shell Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>.408</td>
<td>.271</td>
<td>.570</td>
<td>.089</td>
</tr>
<tr>
<td>15</td>
<td>.558</td>
<td>.271</td>
<td>.720</td>
<td>.089</td>
</tr>
<tr>
<td>21</td>
<td>.708</td>
<td>.271</td>
<td>.870</td>
<td>.089</td>
</tr>
<tr>
<td>25</td>
<td>.808</td>
<td>.271</td>
<td>.970</td>
<td>.089</td>
</tr>
<tr>
<td>31</td>
<td>.958</td>
<td>.271</td>
<td>1.120</td>
<td>.089</td>
</tr>
</tbody>
</table>

#### Rear Mounting

<table>
<thead>
<tr>
<th>Shell Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>.401</td>
<td>.252</td>
<td>.570</td>
<td>.089</td>
</tr>
<tr>
<td>15</td>
<td>.551</td>
<td>.252</td>
<td>.720</td>
<td>.089</td>
</tr>
<tr>
<td>21</td>
<td>.701</td>
<td>.252</td>
<td>.870</td>
<td>.089</td>
</tr>
<tr>
<td>25</td>
<td>.801</td>
<td>.252</td>
<td>.970</td>
<td>.089</td>
</tr>
</tbody>
</table>

For 100 Shell Size

#### Front Mounting

<table>
<thead>
<tr>
<th>Shell Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>.958</td>
<td>.271</td>
<td>1.120</td>
<td>.089</td>
</tr>
</tbody>
</table>

#### Rear Mounting

<table>
<thead>
<tr>
<th>Shell Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>1.101</td>
<td>.252</td>
<td>1.270</td>
<td>.089</td>
</tr>
</tbody>
</table>

For 9-51 Shell Sizes

**NOTES:**
1. Front panel mounting is the preferred mounting method. Front panel mounting dimensions (figure 1) will accommodate either #2-56 screws or jackpost hardware.
2. Rear panel mount dimensions (figure 2) will accommodate #2-56 screw hardware only. When mounting the connector with rear panel mount jackpost see the panel cut-out dimensions.
3. Edgeboard mounting bracket (figure 3) uses #2-56 screws. Dimension .450+/.002 (11.43+/.05) locates the MDM receptacle flush with the end of the board.

**For 100 Shell Size**

**NOTES:**
1. Front mounting is the preferred mounting method. Front panel mounting dimensions (figure 1) will accommodate either #4-40 screws or jackpost hardware.
2. Rear panel mount dimensions (figure 2) will accommodate #4-40 screw hardware only see the panel cut-out dimensions.
3. Edgeboard mounting bracket (figure 3) uses #4-40 screws. Dimension .450+/.002 (11.43+/.05) locates the MDM receptacle flush with the end of the board.

### Specifications and Dimensions

- **Dimensions shown in inches (mm)**
- **Specifications and dimensions subject to change**

www.ittcannon.com  
D-11
This hardware supplied unassembled.

**Screw Lock Assembly**

90° Angle Mounting Bracket

---

**NOTE Torque value is 2.5 in/lbs max.**

Jackpost - (P) 90° Angle Mounting Bracket

---

**Jackpost Bushing (for rear panel mounting—for sizes 9-51)**

---

**Plug and Receptacle Dimensions**

<table>
<thead>
<tr>
<th>Shell Size</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>+.004 (0.10)</td>
<td>-.000 (0.00)</td>
<td>+.004 (0.10)</td>
</tr>
<tr>
<td>15</td>
<td>+.004 (0.10)</td>
<td>-.000 (0.00)</td>
<td>+.004 (0.10)</td>
</tr>
<tr>
<td>21</td>
<td>+.004 (0.10)</td>
<td>-.000 (0.00)</td>
<td>+.004 (0.10)</td>
</tr>
<tr>
<td>25</td>
<td>+.004 (0.10)</td>
<td>-.000 (0.00)</td>
<td>+.004 (0.10)</td>
</tr>
<tr>
<td>31</td>
<td>+.004 (0.10)</td>
<td>-.000 (0.00)</td>
<td>+.004 (0.10)</td>
</tr>
<tr>
<td>37</td>
<td>+.004 (0.10)</td>
<td>-.000 (0.00)</td>
<td>+.004 (0.10)</td>
</tr>
<tr>
<td>51</td>
<td>+.004 (0.10)</td>
<td>-.000 (0.00)</td>
<td>+.004 (0.10)</td>
</tr>
</tbody>
</table>

* A kit consists of 2 jackpost, 2 nuts, 2 washers.

Dimensions shown in inches (mm)

Specifications and dimensions subject to change
This hardware is factory installed.

This hardware is supplied in kits unassembled (2 pieces of each item).

Size 9-51  Mod Code Part Number   Size 100*  Mod Code Part Number

<table>
<thead>
<tr>
<th>Description</th>
<th>Size 9-51</th>
<th>Size 100*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slotted Head Jackscrew Assy Low Profile (Figure 1)</td>
<td>M5 320-9508-025</td>
<td>M5 320-9508-021</td>
</tr>
<tr>
<td>Slotted Head Jackscrew Assy High Profile (Figure 2)</td>
<td>M6 320-9508-027</td>
<td>M6 320-9508-023</td>
</tr>
<tr>
<td>Allen Head Jackscrew Assy Low Profile (Figure 3)</td>
<td>M2 320-9508-026</td>
<td>M2 320-9508-022</td>
</tr>
<tr>
<td>Allen Head Jackscrew Assy High Profile (Figure 2)</td>
<td>M3 320-9508-028</td>
<td>M3 320-9508-024</td>
</tr>
<tr>
<td>Jackpost Assy (Figure 3)</td>
<td>M7 320-9505-033</td>
<td>M7 320-9505-030</td>
</tr>
</tbody>
</table>

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

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Micro-D Metal Shell - .050" Contact Spacing

**MDM**

This hardware supplied unassembled.

- **#4-40 UNC-2A THD**
- **#4-40 UNC-2B NOTHING OR FEMALE THD**

### Dimensions for Rear Panel Mounting

<table>
<thead>
<tr>
<th>Panel Thickness</th>
<th>A (0.13)</th>
<th>B Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/32 (2.4)</td>
<td>.087 (2.14)</td>
<td>320-9505-013</td>
</tr>
<tr>
<td>1/16 (1.6)</td>
<td>.058 (1.42)</td>
<td>320-9505-012</td>
</tr>
<tr>
<td>1/32 (0.8)</td>
<td>.025 (0.64)</td>
<td>320-9505-010</td>
</tr>
<tr>
<td>3/64 (1.2)</td>
<td>.042 (1.07)</td>
<td>320-9505-011</td>
</tr>
</tbody>
</table>

*2 jackposts, 2 nuts, 2 washers

Torque value for size 100

Note: Size 100 requires B mounting hole shell when using rear panel mount jackposts.

**Mounting Hardware Views (for size 100)**

- **Jackpost Bushing (for Rear Panel Mounting)**

- **Jackpost - (P)**
- **Jackpost - (K) Standard**
- **Jackpost - (L) (Low Profile)**

**Specifications and dimensions subject to change**

Dimensions shown in inches (mm)

www.ittcannon.com
Save wear and tear on your equipment and systems connectors by using the "Connector Saver".

The multi-matings and unmatings experienced by most connectors during testing and final check out can be eliminated.

Simply mate the "Connectors Saver" to your unit and use the opposite side for your testing interface...less wear, less tear, less chance of damage. It is available in all eight standard MDM layouts. Mating hardware is available and can be ordered either separately or included with the connector saver.

** Specifications and dimensions subject to change. **

www.ittcannon.com
Micro-D Metal Shell - .050" Contact Spacing
MIL-DTL-83513

How to Order - MIL-DTL-83513 Part Number Nomenclature – Slash Sheets 1-9

SERIES
MDM - Metal Shell, Liquid Crystal Polymer (LCP)
MDB - Diallyl Phthalate Insulator
MDVB - Polyester Insulator

MIL-C-83513 SLASH SHEET
01 - Plug, Connector, Solderpot
02 - Receptacle, Connector, Solderpot
03 - Plug, Connector, Crimp Type
04 - Receptacle, Connector, Crimp Type
05 - Hardware Only
06 - Plug, Connector, Solderpot
07 - Receptacle, Connector, Solderpot
08 - Plug, Connector, Crimp Type
09 - Receptacle, Connector, Crimp Type

WIRE TYPE
No Number - For Solderpot
01 - 18" long, #26 AWG per MIL-W-22759/11-26-9 (all white)
02 - 36" long, #26 AWG per MIL-W-22759/11-26-9 (all white)
03 - 18" long, #26 AWG per MIL-W-22759/11-26
Color Coded per MIL-STD-681, System 1, 10 colors repeating
04 - 36" long, #26 AWG per MIL-W-22759/11-26
Color Coded per MIL-STD-681, System 1, 10 colors repeating
05 - .5" long, #25 AWG, type S per QQ-W-343,
Gold Plated
06 - 1.0" long, #25 AWG, type S per QQ-W-343,
Gold Plated
07 - .5" long, #25 AWG, type S per QQ-W-343,
Tin Plated
08 - 1.0" long, #25 AWG, type S per QQ-W-343,
Tin Plated
09 - 18" long, #26 AWG per MIL-W-22759/33-26-9 (all white)
10 - 36" long, #26 AWG per MIL-W-22759/33-26-9 (all white)
11 - 18" long, #26 AWG per MIL-W-22759/33-26
Color Coded per MIL-STD-681, System 1, 10 colors repeating
12 - 36" long, #26 AWG per MIL-W-22759/33-26
Color Coded per MIL-STD-681, System 1, 10 colors repeating
13 - 72" long, #26 AWG per MIL-W-22759/11-26-9 (all white)
14 - 72" long, #26 AWG per MIL-W-22759/11-26
Color Coded per MIL-STD-681, System 1, 10 colors repeating
15 - 72" long, #26 AWG per MIL-W-22759/33-26-9 (all white)
16 - 72" long, #26 AWG per MIL-W-22759/33-26
Color Coded per MIL-STD-681, System 1, 10 colors repeating

SHELL FINISH
No number - for plastic type connector
C – for Cadmium/Yellow chromate over nickel
N – A174 - Electroless Nickel A174

NOTES:
1. For every Mil Spec Part Number, ITT has one corresponding part number shown an example
2. Tolerance on wire lengths: 18", 36" and 72" long — +.00"/-0.00".5" and 1.00" — + .000"/-0.000"
3. For space application, connector shell finish must be "A174" and wire must be per MIL-W-22759/33-26.
4. Any deviations to these P/N’s will result in assignment of a special P/N, consult factory.
5. Size 100 not available in /06 through /09, See page D-102 for color code chart.
7. For mounting hardware to Military Specification (sizes 9 to 100) see page D-16.
Micro-D Metal Shell - .050" Contact Spacing
MIL-DTL-83513

How to Order - MIL-DTL-83513 Part Number Nomenclature – Slash Sheets 10-27

SERIES
Connector, Electrical, Rectangular
Microminiature, Polarized Shell
PC Board Mounting

MIL-C-83513 SLASH SHEET
10 – Connector, Plug, Condensed Board Right Angle (CBR), Sizes 9 – 37
11 – Connector, Plug, CBR, Size 51
12 – Connector, Plug, CBR, Size 100
13 – Connector, Receptacle, CBR, Sizes 9 – 37
14 – Connector, Receptacle, CBR Size 51
15 – Connector, Receptacle, CBR, Size 100
16 – Connector, Plug, Board Right Angle (BR), Sizes 9 – 37
17 – Connector, Plug, BR, Size 51
18 – Connector, Plug, BR, Size 100
19 – Connector, Receptacle, BR, Sizes 9 – 37
20 – Connector, Receptacle, BR Size 51
21 – Connector, Receptacle, BR Size 100
22 – Connector, Plug, Board Straight (BS), Sizes 9 – 37
23 – Connector, Plug, BS, Size 51
24 – Connector, Plug, BS, Size 100
25 – Connector, Receptacle, BS, Sizes 9 – 37
26 – Connector, Receptacle, BS, Size 51
27 – Connector, Receptacle, BS Size 100

INSERT ARRANGEMENT

METAL SHELL
A - 9 Contact
B - 15 Contact
C - 21 Contact
D - 25 Contact
E - 31 Contact
F - 37 Contact
G - 51 Contact
H - 100 Contact

WIRE TYPE
No Number - For Solderpot
01 - .109" long, #24 AWG solid copper wire per QQ-W-343, Type "S", solder dipped
02 - .140" long, #24 AWG solid copper wire per QQ-W-343, Type "S", solder dipped
03 - .172" long, #24 AWG solid copper wire per QQ-W-343, Type "S", solder dipped

SHELL FINISH
No letter - for plastic type connector
C - Cadmium / Yellow chromate over nickel
N - Electroless Nickel

HARDWARE
N - No jackpost
P - Jackpost (permanently attached)
T - Threaded insert

NOTES:
1 - For every Mil Spec Part Number, ITT has one corresponding part number
2 - Tolerance on wire lengths ±.015
3 - For space application, connector shell finish must be "N".
4 - Any deviations to those P/N's will result in assignment of a special P/N, consult customer service.

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

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ITT

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