## cannon





# Space-saving, Microminiature Solutions with Integrated EMI Shielded Backshells





With advanced, open system digital cockpits, integrated avionics suites and communication systems, EMI shielding is critical to any connector design. In order to accommodate a more effective shielding performance, while reducing weight, components and improving space requirements, ITT Cannon expands its robust, wired / cabled Microminiature MDM series to include an EMI shielded, connector with fully integrated backshells.

The new design utilizes an EMI ground spring on the plug side connector as well as an integrated back shell for shield termination on the back end.

### Features & Benefits

- Superior EMI protection with gold plated ground spring.
- Turnkey cable solution with customized wire lengths
- 9 51 contact positions
- Design to meet MIL-DTL-83513 requirements
- 0.050" center-to-center contact spacing
- Current rating: 3A
- 500 mating cycles
- Wire Gauge 24 38 (AWG)

## Markets

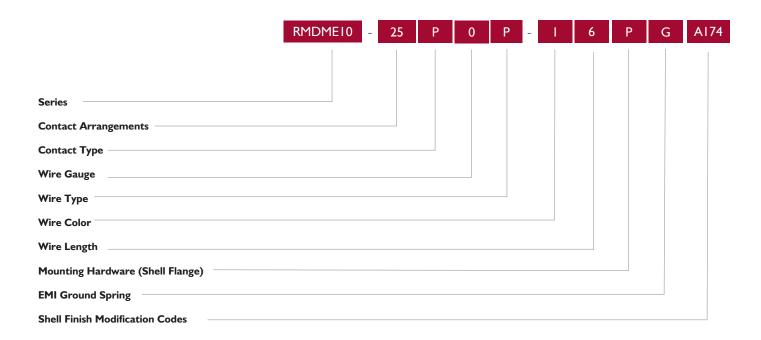






## MDME - Micro-D with Integrated Backshells

How to Order - MDM with Integrated Backshells



#### Series

MDMEI0 - MDM with Integrated

Backshells, wired assemblies

RMDMEIO - RoHS Compliant\*\*

#### **Contact Arrangements**

9, 15, 21, 25, 31, 37, 51

#### **Contact Type**

Socket (Receptacle) S

Pin (Plug) Ρ

#### Wire Gauge (AWG)

#30 GAGE 0

4 #24 GAGE

6 #26 GAGE

8 #38 GAGE

#### Wire Type

Teflon (PTFE) Wire Per

MIL-W-16878/4

Т Teflon Wire Per MIL-W-22759/II

Cross-Link Tefzel Wire Per

MIL-W-22759/33

#### Wire Color

White

Yellow

Color- Code Per MIL-STD 681

10 Color Repeat

#### Overall Wire Length (Inches)

One Inch Minimum and Must be Rounded to the Nearest Whole Inch

Standard Lengths (inches) - 6, 12, 18, 24, 36

#### Mounting Hardware (Shell Flange)

MIL-DTL-83513/5 Hardware

- Jackpost shell size 9-51

M5 lackscrew (slotted head)

Low Profile shell size 9-51

Jackscrew (Allen head)

Low Profile shell size 9-51

#### Commercial Hardware

lacknost \*

lackpost - Low Profile\* L

- Float Mount\*

В - No Hardware (standard) .091 dia. hole shell size 9-51

#### **EMI Ground Spring Option (Pin Type Only)**

- No Ground Spring

- Ground Spring Installed

#### **Shell Finish Modification Codes**

A101 - Yellow Chromate/Cadmium over Nickel

None - Electroless Nickel (RoHS Compliant)

(Standard)

A172 - Gold Over Nickel (RoHS Compliant)

AI4I - Irridite/Alodine

A30 - Black Anodize

(For special modification codes, consult customer service.)

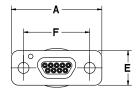
\*Factory Installed

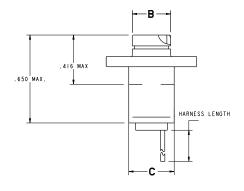
\*\*If RoHS is required, you must use the "RMDMEI0" suffix for the series, the termination tail will be gold plated; not tinned. RoHS requested parts must include A174 or A172 plating modifiers.

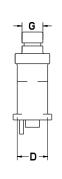




MDME10 Series Shell Size 9 - 51 Plug

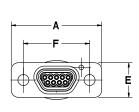


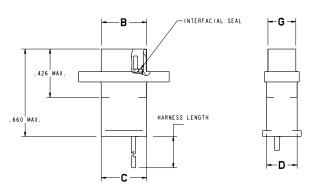




Shell Size	A MAX	B MAX	C MAX	D MAX	E MAX	F ±.005	G MAX
9	.785	.334	.400		300	.565	5 5 5 5
15	.935	.484	.550			.715	
21	1.085	.634	.700	.270 .380		.865	
25	1.185	.734	.800		.380	.965	
31	1.335	.884	.950			1.115	
37	1.485	1.034	1.100			1.265	
51	1.435	.984	1.050	.310	.351	1.215	.228

## MDME10 Series Shell Size 9 - 51 Receptacle



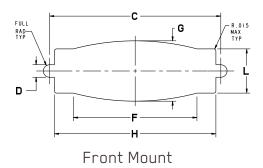


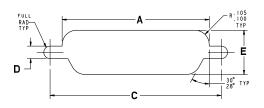
Shell Size	A MAX	B MAX	C MAX	D MAX	E MAX	F ±.005	G MAX
9	.785	.402	.400		.270 .380	.565	.253
15	.935	.552	.550			.715	
21	1.085	.702	.700	270		.865	
25	1.185	.802	.800	.270		.965	
31	1.335	.952	.950			1.115	
37	1.485	1.102	1.100			1.265	
51	1.435	1.052	1.050	.310	.351	1.215	.296

## Micro-D with Integrated Backshells

## **MDME**

#### Panel Cutout Dimensions



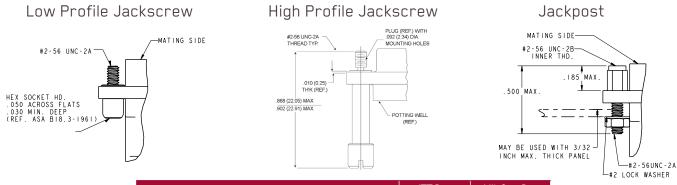


Rear Mount

Shell Size	A + .004 000	C + .005 000	D + .005 000	E + .004 000	F + .005 000	G + .004 000	H + .005 000	L + .004 000
9	.401	.570		.252	.300	.400	.500	.271
15	.551	.720	.089		.420		.650	
21	.701	.870			.550		.800	
25	.801	.970			.650		.900	
31	.951	1.120			.790		1.050	
37	1.101	1.270			.950		1.200	
51	1.051	1.220		.295	.800	.430	1.150	.315

#### Mounting Hardware

If ordered connector without hardware or as replacement hardware. This hardware supplied in kits unassembled (2 pieces of each item).



Hardware Style	Description	ITT Part Number	MIL-Spec Part Number	
Low Profile Jackscrew	Slotted Head Jackscrew	320-9508-025	M83513/5-05	
Low Profile Jackscrew	Allen Head Jackscrew	320-9508-026	M83513/5-02	
High Profile Jackscrew	Slotted Head Jackscrew	320-9508-027	M83513/5-06	
High Profile Jackscrew	Allen Head Jackscrew	320-9508-028	M83513/5-03	
Jackpost		320-9508-033	M83513/5-07	

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