



With an increasing number of MDM connectors being used in avionics and military equipment and with increasing emphasis being put on EMI, RFI and EMP shielding, Cannon have developed a range of filter connectors to suit most applications.

The TMDM receptacle accommodates from 8 to 37 sizes, 24 AWG socket contacts on 1,27 (.050) centres and mates with the standard MDM plugs.

### Features

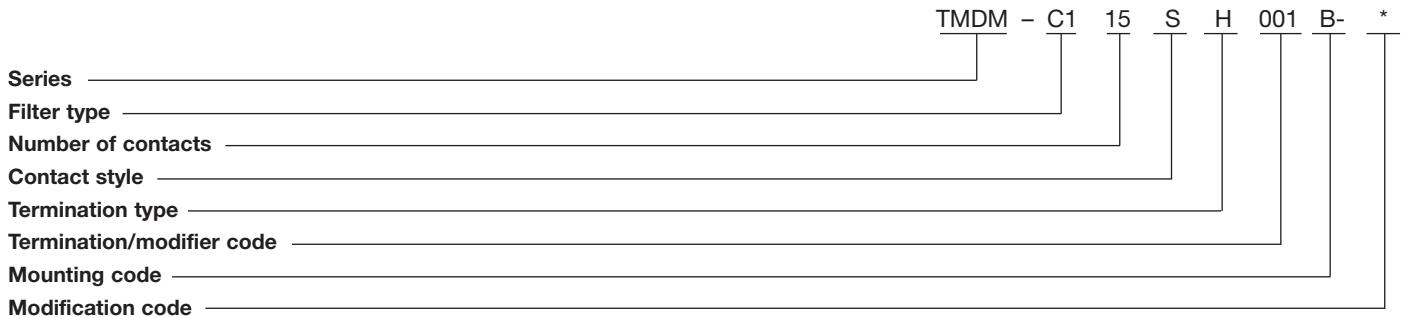
- Transverse monolith filter for EMI and RFI shielding.
- Rugged aluminum one piece shell.
- Silicone interfacial environmental seal.
- Glass filled diallyl phthalate insulator.
- A variety of filter types for each pin.

## Specifications

### Standard materials & finishes

Shell	Aluminum alloy per QQ-A-200/8 with electroless nickel finish per QQ-N-290
Insulator	Glass filled diallyl phthalate per MIL-M-14. Type SDGF
Contact, socket	Copper alloy, 50 microinch gold per MIL-G-45204, Type II, Class I
Interfacial seal	Silicone base rubber
<b>ELECTRICAL DATA</b>	
No. of contacts	9 to 37
Dielectric withstanding voltage	300 VAC
Insulation resistance	5000 Mohm at 100 VDC
Voltage rating (working)	100 VDC
Current rating	3 amps max.
Maximum capacitance	250, 500, 1000, 2000 picofarads
Filter type	C
<b>MECHANICAL FEATURES</b>	
Size or length	6 sizes
Coupling	Friction/jackscrews
Polarization	Keystone shaped shell
Contact spacing	.050 (1,27) centers
Shell style	Single piece receptacle

## How to Order



### Series:

Filter TMDM - Micro "D" - Metal housing

### Filter type:

- "C" capacitor type
- C1 150 - 250 pF capacitance
- C2 300 - 500 pF capacitance
- C3 700 - 1000 pF capacitance
- C4 1300 - 2000 pF capacitance

### Number of contacts:

9, 15, 21, 25, 31, 37 only

### Contact style:

- S - socket (receptacle)
- P - Pin (plug)

### Termination type:

- H - harness, insulated solid or stranded wire
- L - lead, solid uninsulated wire

### Termination:

Consult standard wire termination code for lead material and lead length

### Mounting code:

- A - Flange mounting, Ø.125 (3,18) mounting holes
- B - Flange mounting, Ø.092 (2,34) mounting holes
- L - Low profile (slotted head)
- M2 - Allen head jackscrew assembly,

low profile

- M3 - Allen head jackscrew assembly, high profile
- M5 - Slot head jackscrew assembly, low profile
- M6 - Slot head jackscrew assembly, high profile
- M7 - Jacknut assembly
- P - Jackpost

### Modification code:

Shell finish MOD. Codes. \*  
To be assigned as required

\* No number = Standard tin/lead finish

Dimensions shown in inch (mm)

Specifications and dimensions subject to change

www.ittcannon.com



## Guaranteed Minimum Attenuation

Filter designation	Capacitance range (pF)	Minimum Insertion Loss-decibels							
		10 MHz	15 MHz	30 MHz	50 MHz	100 MHz	200 MHz	500 MHz	1 GHz
C1	150 - 250				4	6	15	20	35
C2	300 - 500			3	6	12	18	25	40
C3	700 - 1000		3	7	13	17	25	38	48
C4	1300 - 2000	5	8	13	18	23	30	40	50

## Standard Wire Termination Codes

Cannon Modification Codes – (Not Mil Spec)

The following termination codes are listed for your information. For additional codes please refer to Appendix on page 79 and 81. **All wire lengths are minimum.**

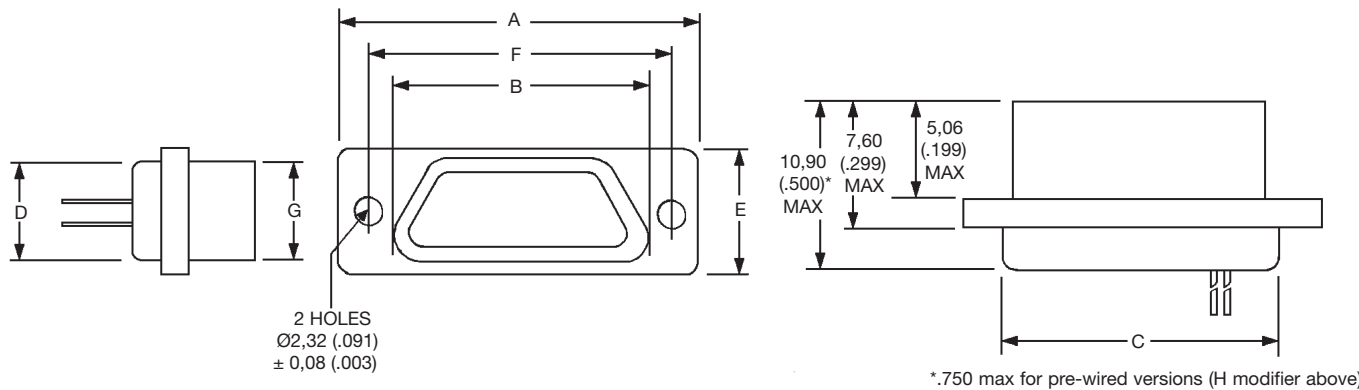
**Harness Type (H) #26 AWG per MIL-W-16878/4 Type E Teflon, stranded**

Length	All Yellow	Color Coded
3 (76.2)	H020	H027
6 (152.4)	H019	H016
8 (203.2)	H026	H034
10 (254.0)	H029	H025
12 (304.8)	H028	H002
18 (457.2)	H001	H003
20 (508.0)	H038	H023
24 (509.6)	H009	H004
30 (762.0)	H010	H005
36 (914.4)	H011	H006
48 (1219.2)	H013	H048
72 (1828.8)	H017	H046
120 (3048.0)	H042	H041

**Solid Uninsulated Type (L) #25 AWG gold plated copper.**

Code	Length
L61	.125 (.18)
L56	.150 (3.81)
L57	.190 (4.83)
L39	.250 (5.35)
L58	.375 (9.52)
L1	.500 (12.70)
L14	.750 (19.05)
L2	1.000 (25.40)
L7	1.500 (38.10)
L6	2.000 (50.80)
L6	2.500 (63.50)
L10	3.000 (76.20)

## Shell Dimensions



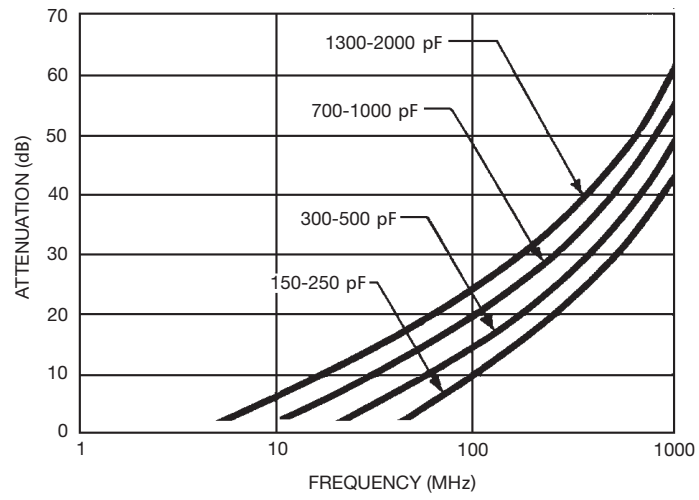
Part Number by shell size	A max	B max	C max	D max	E max	F max ±0,13 (.005)	G max
MDMT-9S*	.785 (19,94)	.400 (10,16)	.400 (10,16)	.270 (6,86)	.308 (7,83)	.565 (14,36)	.251 (6,38)
MDMT-15S*	.935 (23,75)	.550 (13,97)	.550 (13,97)	.270 (6,86)	.308 (7,83)	.715 (18,17)	.251 (6,38)
MDMT-21S*	1.085 (27,60)	.700 (17,78)	.700 (17,78)	.270 (6,86)	.308 (7,83)	.865 (21,98)	.251 (6,38)
MDMT-25S*	1.185 (30,10)	.800 (20,32)	.800 (20,32)	.270 (6,86)	.308 (7,83)	.965 (24,52)	.251 (6,38)
MDMT-31S*	1.335 (33,90)	.950 (24,13)	.950 (24,13)	.270 (6,86)	.308 (7,83)	1.115 (28,30)	.251 (6,38)
MDMT-37S*	1.485 (37,70)	1.100 (28,00)	1.100 (28,00)	.270 (6,86)	.308 (7,83)	1.265 (32,20)	.251 (6,38)



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

www.ittcannon.com

## Typical Filter Performance



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

[www.ittcannon.com](http://www.ittcannon.com)

