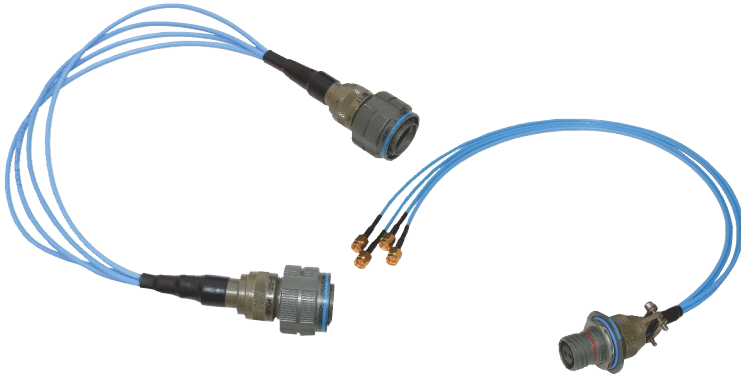


MIL-38999 Based RF Coaxial Cable Sets, DC-18 GHz, MF05 Series

Avoid Multiple Coaxial Cables • Quick Assemble/Disassemble • D38999 more rugged than SMA, N

**DC-18 GHz use, flexible RF cable
MIL-38999 Connectors**



Our MIL-38999 connectors based RF Cable Sets are ideal for military applications where panel space is at a premium. Instead of using a bunch of RF cables the designer can choose 1 single cable set with D38999 connectors and with multiple wire configurations. Well suited for portable radars where quick field assembly & disassembly is important. Constructed using QPL'ed D38999 connectors from Deutsch/Aero, imported hi-frequency coaxial contacts and Hi-Frequency Coaxial cable from USA.

FEATURES, MIL STD MATERIALS

- MIL-38999 Series III connectors are QPL listed from suppliers like Deutsch, Aero Inc
- MIL-39029 compliant Hi-Frequency Coaxial Inserts
- 3 varieties available for different price ranges for different frequencies : 0.5 GHz, 3 GHz & 18 GHz
- Many combinations of channels available including 4 wire, 6 wire, 8 wire, 11 wire. Please contact us for custom versions
- Imported Hi-Frequency cable conforms to MIL-C-17
- Aluminium Shell with Olive Drab Coating

MIL/DEFENSE APPLICATIONS

- Where panel space is at a premium. Multiple discrete RF cables can be substituted by single D38999 cable set
- Portable radars where quick field assembly & disassembly is important
- Applications where more rugged solution than SMA/N/TNC is needed

Hi-Freq. Insert Arrangements for DC-3 & DC-18 GHz, D38999 RF Cable Sets

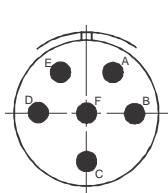


Fig 1
6 RF contacts,
Shell size 17,
E6 Pattern

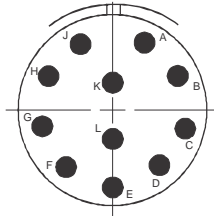


Fig 2
11 RF contacts,
Shell size 21,
G11 Pattern

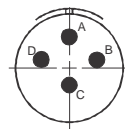


Fig 3
4 RF contacts,
Shell size 13,
C4 Pattern

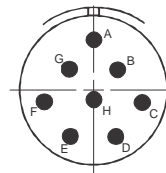


Fig 4
8 RF contacts,
Shell size 17,
E8 Pattern

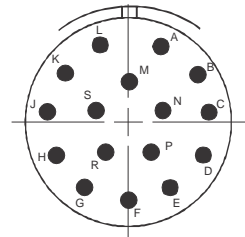


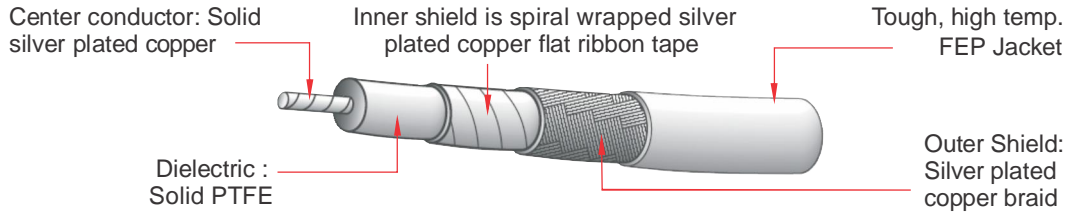
Fig 5
16 RF contacts,
Shell size 21,
G16 Pattern

Low Freq. Insert Arrangements for DC-0.5GHz, D38999 RF Cable Sets

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MF05 Cable Construction



Physical & Mechanical Specifications

Attenuation & Power Handling Data

Frequency	Insertion Loss		Power Watts
	dB/ft	dB/m	
400 MHz	0.14	0.46	190
1 GHz	0.24	0.76	130
2 GHz	0.32	1.05	76
3 GHz	0.39	1.28	62
5 GHz	0.53	1.73	54
10 GHz	0.81	2.65	35
13.5 GHz	0.92	3.01	24
18 GHz	1.11	3.64	20

Dimensions	inches	mm
Center Conductor	0.02"	0.51
Jacket	0.106"	2.70
Bend Radius (static)	0.23"	6
Bend Radius (repeated)	0.78"	20
Weight	0.015 lb/ft (0.020 Kg/m)	
Temperature Range	-55°C ~ +125°C	

Electrical Specifications

Impedance	50 ohms
Velocity of Propagation	70 %
Shielding Effectiveness	better than -90 dB
Capacitance	30 pF/ft
Operating Frequency	18 GHz

Ordering Codes Description

MF05 - (Length) (Connector 1) (Connector 2)
 □ □ - □ (□ / □ / □) - □ (□ / □ / □) - □ - □
L L 1 2 3 4 1 2 3 4 U W

LL	Length	0.5 = 0.5 ; 1 = 1.0 ; 2 = 2.0
1	Connector Series	MIL38999 = D38999
2	Number of Channels(wires)	4 channel = 4xST ; 6 channel = 6xST
3	Male/Female Designator	P = Male; W = Female Wallmount; J = Female Jamnut
4	Insert Pattern Code	C4 = C4; E6 = E6; E8 = E8; G11 = G11; G16 = G16
U	Unit of Length	M = Meter ; F = Feet ; I = Inch
W	Frequency Code	18 GHz = 18G ; 3 GHz = 3G ; 0.5 GHz = 0.5G

1m cable set with D38999 (Male) on both sides, 4 wire, 3GHz = MF05-1.0-D38999(4xST/P/E6)-D38999(4xST/P/E6)-M-3G

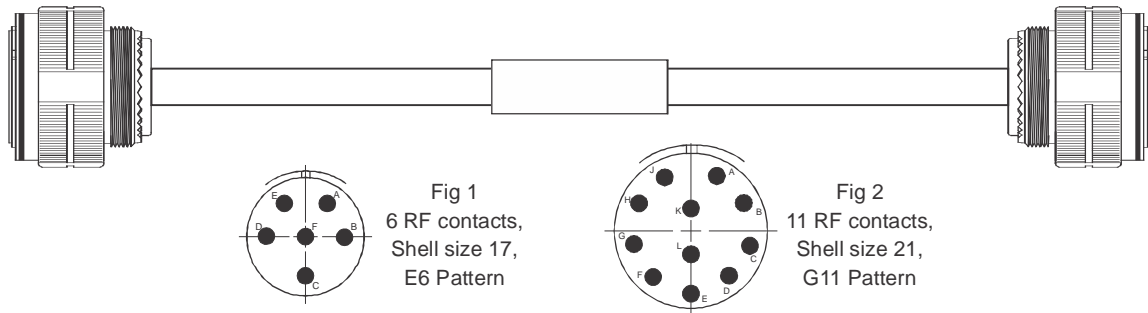
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MIL-38999 Based RF Coaxial Cable Sets, DC-18 GHz, MF05 Series

Avoid Multiple Coaxial Cables • Quick Assemble/Disassemble • D38999 more rugged than SMA, N

D38999-D38999 RF Cable Sets Ordering Codes - DC-18 GHz



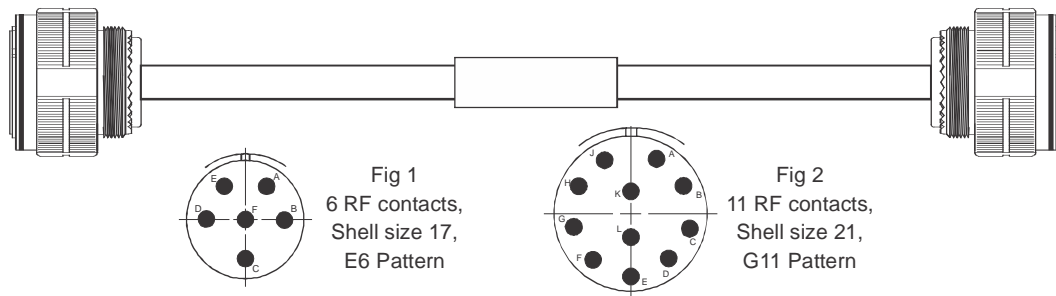
Ordering Code	Connector 1	Connector 2	Length	Insert Pattern	Insertion Loss (dB)			
					3 GHz	6 GHz	9 GHz	18 GHz
DC-18 GHz, 6 wire								
MF05-0.5-D38999(6xST/P/E6)-D38999(6xST/P/E6)-M-18G	D38999 Plug, 6 x RF	D38999 Plug, 6 x RF	0.5 m	Fig 1*	0.82	1.19	1.49	2.23
MF05-1.0-D38999(6xST/P/E6)-D38999(6xST/P/E6)-M-18G	D38999 Plug, 6 x RF	D38999 Plug, 6 x RF	1 m	Fig 1*	1.44	2.11	2.68	3.94
MF05-2.0-D38999(6xST/P/E6)-D38999(6xST/P/E6)-M-18G	D38999 Plug, 6 x RF	D38999 Plug, 6 x RF	2 m	Fig 1*	2.69	3.94	4.96	7.42
MF05-5.0-D38999(6xST/P/E6)-D38999(6xST/P/E6)-M-18G	D38999 Plug, 6 x RF	D38999 Plug, 6 x RF	5 m	Fig 1*	6.42	9.43	11.88	17.86
MF05-1.0-D38999(6xST/P/E6)-D38999(6xST/P/E6)-F-18G	D38999 Plug, 6 x RF	D38999 Plug, 6 x RF	1 feet	Fig 1*	0.55	0.8	1.01	1.34
MF05-2.0-D38999(6xST/P/E6)-D38999(6xST/P/E6)-F-18G	D38999 Plug, 6 x RF	D38999 Plug, 6 x RF	2 feet	Fig 1*	0.92	1.35	1.69	2.55
DC-18 GHz, 4 wire								
MF05-0.5-D38999(4xST/P/E6)-D38999(4xST/P/E6)-M-18G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	0.5 m	Fig 1*	0.82	1.19	1.49	2.23
MF05-1.0-D38999(4xST/P/E6)-D38999(4xST/P/E6)-M-18G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	1 m	Fig 1*	1.44	2.11	2.68	3.94
MF05-2.0-D38999(4xST/P/E6)-D38999(4xST/P/E6)-M-18G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	2 m	Fig 1*	2.69	3.94	4.96	7.42
MF05-5.0-D38999(4xST/P/E6)-D38999(4xST/P/E6)-M-18G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	5 m	Fig 1*	6.42	9.43	11.88	17.86
MF05-1.0-D38999(4xST/P/E6)-D38999(4xST/P/E6)-F-18G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	1 feet	Fig 1*	0.55	0.8	1.01	1.34
MF05-2.0-D38999(4xST/P/E6)-D38999(4xST/P/E6)-F-18G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	2 feet	Fig 1*	0.92	1.35	1.69	2.55
DC-18 GHz, 11 wire								
MF05-0.5-D38999(11xST/P/G11)-D38999(11xST/P/G11)-M-18G	D38999 Plug, 11 x RF	D38999 Plug, 11 x RF	0.5 m	Fig 2*	0.82	1.19	1.49	2.23
MF05-1.0-D38999(11xST/P/G11)-D38999(11xST/P/G11)-M-18G	D38999 Plug, 11 x RF	D38999 Plug, 11 x RF	1 m	Fig 2*	1.44	2.11	2.68	3.94
MF05-2.0-D38999(11xST/P/G11)-D38999(11xST/P/G11)-M-18G	D38999 Plug, 11 x RF	D38999 Plug, 11 x RF	2 m	Fig 2*	2.69	3.94	4.96	7.42
MF05-5.0-D38999(11xST/P/G11)-D38999(11xST/P/G11)-M-18G	D38999 Plug, 11 x RF	D38999 Plug, 11 x RF	5 m	Fig 2*	6.42	9.43	11.88	17.86
MF05-1.0-D38999(11xST/P/G11)-D38999(11xST/P/G11)-F-18G	D38999 Plug, 11 x RF	D38999 Plug, 11 x RF	1 feet	Fig 2*	0.55	0.8	1.01	1.34
MF05-2.0-D38999(11xST/P/G11)-D38999(11xST/P/G11)-F-18G	D38999 Plug, 11 x RF	D38999 Plug, 11 x RF	2 feet	Fig 2*	0.92	1.35	1.69	2.55

* For detailed mechanical dimensions, panel cutouts refer to standard MIL-38999 Series III connectors

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D38999-D38999 RF Cable Sets Ordering Codes - DC-3 GHz



Ordering Code	Connector 1	Connector 2	Length	Insert Pattern	Insertion Loss (dB)			
					3 GHz	6 GHz	9 GHz	18 GHz
DC-3 GHz, 4 wire								
MF05-0.5-D38999(4xST/P/E6)-D38999(4xST/P/E6)-M-3G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	0.5 m	Fig 1*	0.82	-	-	-
MF05-1.0-D38999(4xST/P/E6)-D38999(4xST/P/E6)-M-3G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	1 m	Fig 1*	1.44	-	-	-
MF05-2.0-D38999(4xST/P/E6)-D38999(4xST/P/E6)-M-3G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	2 m	Fig 1*	2.69	-	-	-
MF05-5.0-D38999(4xST/P/E6)-D38999(4xST/P/E6)-M-3G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	5 m	Fig 1*	6.42	-	-	-
MF05-1.0-D38999(4xST/P/E6)-D38999(4xST/P/E6)-F-3G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	1 feet	Fig 1*	0.55	-	-	-
MF05-2.0-D38999(4xST/P/E6)-D38999(4xST/P/E6)-F-3G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	2 feet	Fig 1*	0.92	-	-	-
DC-3 GHz, 6 wire								
MF05-0.5-D38999(6xST/P/E6)-D38999(6xST/P/E6)-M-3G	D38999 Plug, 6 x RF	D38999 Plug, 6 x RF	0.5 m	Fig 1*	0.82	-	-	-
MF05-1.0-D38999(6xST/P/E6)-D38999(6xST/P/E6)-M-3G	D38999 Plug, 6 x RF	D38999 Plug, 6 x RF	1 m	Fig 1*	1.44	-	-	-
MF05-2.0-D38999(6xST/P/E6)-D38999(6xST/P/E6)-M-3G	D38999 Plug, 6 x RF	D38999 Plug, 6 x RF	2 m	Fig 1*	2.69	-	-	-
MF05-5.0-D38999(6xST/P/E6)-D38999(6xST/P/E6)-M-3G	D38999 Plug, 6 x RF	D38999 Plug, 6 x RF	5 m	Fig 1*	6.42	-	-	-
MF05-1.0-D38999(6xST/P/E6)-D38999(6xST/P/E6)-F-3G	D38999 Plug, 6 x RF	D38999 Plug, 6 x RF	1 feet	Fig 1*	0.55	-	-	-
MF05-2.0-D38999(6xST/P/E6)-D38999(6xST/P/E6)-F-3G	D38999 Plug, 6 x RF	D38999 Plug, 6 x RF	2 feet	Fig 1*	0.92	-	-	-
DC-3 GHz, 11 wire								
MF05-0.5-D38999(11xST/P/G11)-D38999(11xST/P/G11)-M-3G	D38999 Plug, 11 x RF	D38999 Plug, 11 x RF	0.5 m	Fig 2*	0.82	-	-	-
MF05-1.0-D38999(11xST/P/G11)-D38999(11xST/P/G11)-M-3G	D38999 Plug, 11 x RF	D38999 Plug, 11 x RF	1 m	Fig 2*	1.44	-	-	-
MF05-2.0-D38999(11xST/P/G11)-D38999(11xST/P/G11)-M-3G	D38999 Plug, 11 x RF	D38999 Plug, 11 x RF	2 m	Fig 2*	2.69	-	-	-
MF05-5.0-D38999(11xST/P/G11)-D38999(11xST/P/G11)-M-3G	D38999 Plug, 11 x RF	D38999 Plug, 11 x RF	5 m	Fig 2*	6.42	-	-	-
MF05-1.0-D38999(11xST/P/G11)-D38999(11xST/P/G11)-F-3G	D38999 Plug, 11 x RF	D38999 Plug, 11 x RF	1 feet	Fig 2*	0.55	-	-	-
MF05-2.0-D38999(11xST/P/G11)-D38999(11xST/P/G11)-F-3G	D38999 Plug, 11 x RF	D38999 Plug, 11 x RF	2 feet	Fig 2*	0.92	-	-	-

* For detailed mechanical dimensions, panel cutouts refer to standard MIL-38999 Series III connectors

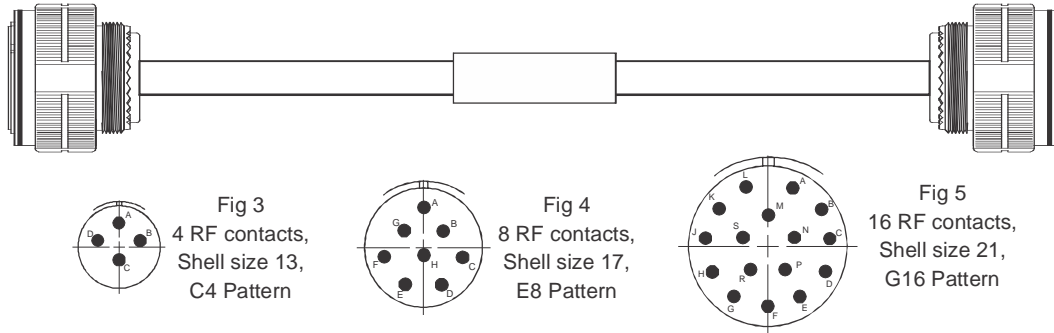
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MIL-38999 Based RF Coaxial Cable Sets, DC-18 GHz, MF05 Series

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D38999-D38999 RF Cable Sets Ordering Codes - DC-0.5 GHz



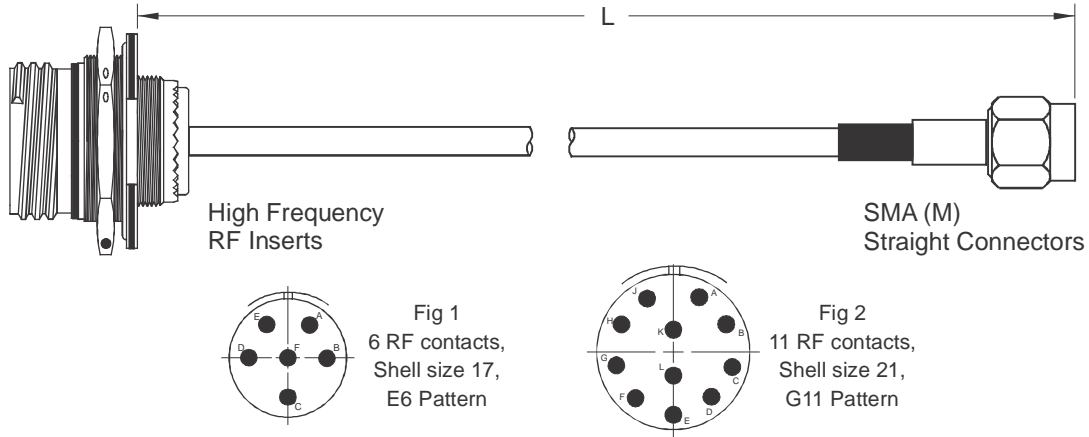
Ordering Code	Connector 1	Connector 2	Length	Insert Pattern	Insertion Loss (dB)			
					0.5GHz	6 GHz	9 GHz	18 GHz
DC-0.5 GHz, 4 wire								
MF05-0.5-D38999(4xST/P/C4)-D38999(4xST/P/C4)-M-0.5G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	0.5 m	Fig 3*	0.33	-	-	-
MF05-1.0-D38999(4xST/P/C4)-D38999(4xST/P/C4)-M-0.5G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	1 m	Fig 3*	0.58	-	-	-
MF05-2.0-D38999(4xST/P/C4)-D38999(4xST/P/C4)-M-0.5G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	2 m	Fig 3*	1.09	-	-	-
MF05-5.0-D38999(4xST/P/C4)-D38999(4xST/P/C4)-M-0.5G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	5 m	Fig 3*	2.62	-	-	-
MF05-1.0-D38999(4xST/P/C4)-D38999(4xST/P/C4)-F-0.5G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	1 feet	Fig 3*	0.22	-	-	-
MF05-2.0-D38999(4xST/P/C4)-D38999(4xST/P/C4)-F-0.5G	D38999 Plug, 4 x RF	D38999 Plug, 4 x RF	2 feet	Fig 3*	0.37	-	-	-
DC-0.5 GHz, 8 wire								
MF05-0.5-D38999(8xST/P/E8)-D38999(8xST/P/E8)-M-0.5G	D38999 Plug, 8 x RF	D38999 Plug, 8 x RF	0.5 m	Fig 4*	0.33	-	-	-
MF05-1.0-D38999(8xST/P/E8)-D38999(8xST/P/E8)-M-0.5G	D38999 Plug, 8 x RF	D38999 Plug, 8 x RF	1 m	Fig 4*	0.58	-	-	-
MF05-2.0-D38999(8xST/P/E8)-D38999(8xST/P/E8)-M-0.5G	D38999 Plug, 8 x RF	D38999 Plug, 8 x RF	2 m	Fig 4*	1.09	-	-	-
MF05-5.0-D38999(8xST/P/E8)-D38999(8xST/P/E8)-M-0.5G	D38999 Plug, 8 x RF	D38999 Plug, 8 x RF	5 m	Fig 4*	2.62	-	-	-
MF05-1.0-D38999(8xST/P/E8)-D38999(8xST/P/E8)-F-0.5G	D38999 Plug, 8 x RF	D38999 Plug, 8 x RF	1 feet	Fig 4*	0.22	-	-	-
MF05-2.0-D38999(8xST/P/E8)-D38999(8xST/P/E8)-F-0.5G	D38999 Plug, 8 x RF	D38999 Plug, 8 x RF	2 feet	Fig 4*	0.37	-	-	-
DC-0.5 GHz, 16 wire								
MF05-0.5-D38999(16xST/P/G16)-D38999(16xST/P/G16)-M-0.5G	D38999 Plug, 16 x RF	D38999 Plug, 16 x RF	0.5 m	Fig 5*	0.33	-	-	-
MF05-1.0-D38999(16xST/P/G16)-D38999(16xST/P/G16)-M-0.5G	D38999 Plug, 16 x RF	D38999 Plug, 16 x RF	1 m	Fig 5*	0.58	-	-	-
MF05-2.0-D38999(16xST/P/G16)-D38999(16xST/P/G16)-M-0.5G	D38999 Plug, 16 x RF	D38999 Plug, 16 x RF	2 m	Fig 5*	1.09	-	-	-
MF05-5.0-D38999(16xST/P/G16)-D38999(16xST/P/G16)-M-0.5G	D38999 Plug, 16 x RF	D38999 Plug, 16 x RF	5 m	Fig 5*	2.62	-	-	-
MF05-1.0-D38999(16xST/P/G16)-D38999(16xST/P/G16)-F-0.5G	D38999 Plug, 16 x RF	D38999 Plug, 16 x RF	1 feet	Fig 5*	0.22	-	-	-
MF05-2.0-D38999(16xST/P/G16)-D38999(16xST/P/G16)-F-0.5G	D38999 Plug, 16 x RF	D38999 Plug, 16 x RF	2 feet	Fig 5*	0.37	-	-	-

* For detailed mechanical dimensions, panel cutouts refer to standard MIL-38999 Series III connectors

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D38999-SMA/TNC/N Breakout RF Cable Set Ordering Codes - DC-18 GHz



Ordering Code	Connector 1	Connector 2	Length	Insert Pattern	Insertion Loss (dB)			
					3 GHz	6 GHz	9 GHz	18 GHz
DC-18 GHz, 6 x SMA, Wall Mount MIL38999								
MF05-1.0-D38999(6xST/W/E6)-SMA(6xST/M)-M-18G	D38999 Wall Mount, 6 x RF	6 x SMA	1 m	Fig 1 *	0.82	1.19	1.49	2.23
MF05-2.0-D38999(6xST/W/E6)-SMA(6xST/M)-M-18G	D38999 Wall Mount, 6 x RF	6 x SMA	2 m	Fig 1 *	1.44	2.11	2.68	3.94
MF05-5.0-D38999(6xST/W/E6)-SMA(6xST/M)-M-18G	D38999 Wall Mount, 6 x RF	6 x SMA	5 m	Fig 1 *	2.69	3.94	4.96	7.42
MF05-1.0-D38999(6xST/W/E6)-SMA(6xST/M)-F-18G	D38999 Wall Mount, 6 x RF	6 x SMA	1 feet	Fig 1 *	6.42	9.43	11.88	17.86
MF05-2.0-D38999(6xST/W/E6)-SMA(6xST/M)-F-18G	D38999 Wall Mount, 6 x RF	6 x SMA	2 feet	Fig 1 *	0.55	0.8	1.01	1.34
DC-18 GHz, 4 x SMA, Wall Mount MIL38999								
MF05-1.0-D38999(4xST/W/E6)-SMA(4xST/M)-M-18G	D38999 Wall Mount, 4 x RF	4 x SMA	1 m	Fig 1 *	0.82	1.19	1.49	2.23
MF05-2.0-D38999(4xST/W/E6)-SMA(4xST/M)-M-18G	D38999 Wall Mount, 4 x RF	4 x SMA	2 m	Fig 1 *	1.44	2.11	2.68	3.94
MF05-5.0-D38999(4xST/W/E6)-SMA(4xST/M)-M-18G	D38999 Wall Mount, 4 x RF	4 x SMA	5 m	Fig 1 *	2.69	3.94	4.96	7.42
MF05-1.0-D38999(4xST/W/E6)-SMA(4xST/M)-F-18G	D38999 Wall Mount, 4 x RF	4 x SMA	1 feet	Fig 1 *	6.42	9.43	11.88	17.86
MF05-2.0-D38999(4xST/W/E6)-SMA(4xST/M)-F-18G	D38999 Wall Mount, 4 x RF	4 x SMA	2 feet	Fig 1 *	0.55	0.8	1.01	1.34
DC-18 GHz, 11 x SMA, Wall Mount MIL38999								
MF05-1.0-D38999(11xST/W/G11)-SMA(11xST/M)-M-18G	D38999 Wall Mount, 11 x RF	11 x SMA	1 m	Fig 2*	0.82	1.19	1.49	2.23
MF05-2.0-D38999(11xST/W/G11)-SMA(11xST/M)-M-18G	D38999 Wall Mount, 11 x RF	11 x SMA	2 m	Fig 2*	1.44	2.11	2.68	3.94
MF05-5.0-D38999(11xST/W/G11)-SMA(11xST/M)-M-18G	D38999 Wall Mount, 11 x RF	11 x SMA	5 m	Fig 2*	2.69	3.94	4.96	7.42
MF05-1.0-D38999(11xST/W/G11)-SMA(11xST/M)-F-18G	D38999 Wall Mount, 11 x RF	11 x SMA	1 feet	Fig 2*	6.42	9.43	11.88	17.86
MF05-2.0-D38999(11xST/W/G11)-SMA(11xST/M)-F-18G	D38999 Wall Mount, 11 x RF	11 x SMA	2 feet	Fig 2*	0.55	0.8	1.01	1.34

* For detailed mechanical dimensions, panel cutouts refer to standard MIL-38999 Series III connectors

* Other connectors like TNC, N, BMA etc available - substitute instead of SMA in P/N

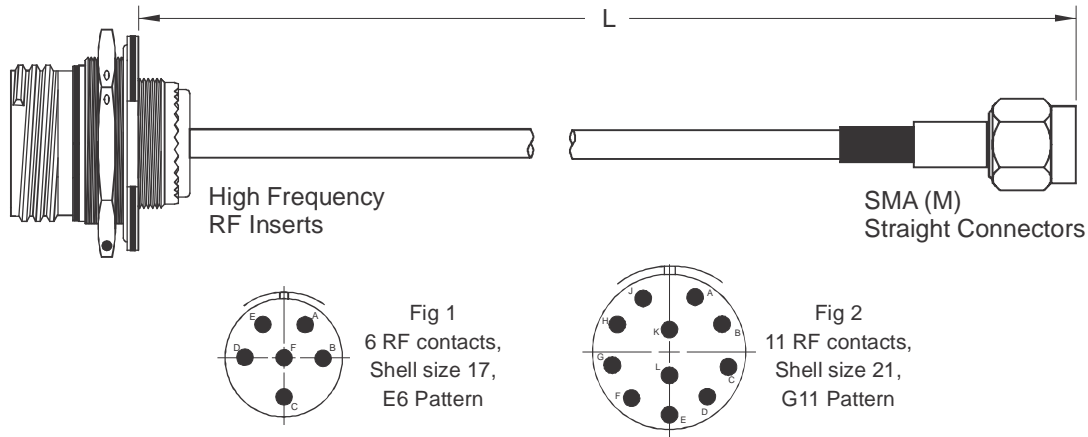
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MIL-38999 Based RF Coaxial Cable Sets, DC-18 GHz, MF05 Series

Avoid Multiple Coaxial Cables • Quick Assemble/Disassemble • D38999 more rugged than SMA, N

D38999-SMA/TNC/N Breakout RF Cable Set Ordering Codes - DC-3 GHz



Ordering Code	Connector 1	Connector 2	Length	Insert Pattern	Insertion Loss (dB)			
					3 GHz	6 GHz	9 GHz	18 GHz
DC-3 GHz, 6 x SMA, Wall Mount MIL38999								
MF05-1.0-D38999(6xSTW/E6)-SMA(6xST/M)-M-3G	D38999 Wall Mount, 6 x RF	6 x SMA	1 m	Fig 1 *	0.82	-	-	-
MF05-2.0-D38999(6xSTW/E6)-SMA(6xST/M)-M-3G	D38999 Wall Mount, 6 x RF	6 x SMA	2 m	Fig 1 *	1.44	-	-	-
MF05-5.0-D38999(6xSTW/E6)-SMA(6xST/M)-M-3G	D38999 Wall Mount, 6 x RF	6 x SMA	5 m	Fig 1 *	2.69	-	-	-
MF05-1.0-D38999(6xSTW/E6)-SMA(6xST/M)-F-3G	D38999 Wall Mount, 6 x RF	6 x SMA	1 feet	Fig 1 *	6.42	-	-	-
MF05-2.0-D38999(6xSTW/E6)-SMA(6xST/M)-F-3G	D38999 Wall Mount, 6 x RF	6 x SMA	2 feet	Fig 1 *	0.55	-	-	-
DC-3 GHz, 4 x SMA, Wall Mount MIL38999								
MF05-1.0-D38999(4xSTW/E6)-SMA(4xST/M)-M-3G	D38999 Wall Mount, 4 x RF	4 x SMA	1 m	Fig 1 *	0.82	-	-	-
MF05-2.0-D38999(4xSTW/E6)-SMA(4xST/M)-M-3G	D38999 Wall Mount, 4 x RF	4 x SMA	2 m	Fig 1 *	1.44	-	-	-
MF05-5.0-D38999(4xSTW/E6)-SMA(4xST/M)-M-3G	D38999 Wall Mount, 4 x RF	4 x SMA	5 m	Fig 1 *	2.69	-	-	-
MF05-1.0-D38999(4xSTW/E6)-SMA(4xST/M)-F-3G	D38999 Wall Mount, 4 x RF	4 x SMA	1 feet	Fig 1 *	6.42	-	-	-
MF05-2.0-D38999(4xSTW/E6)-SMA(4xST/M)-F-3G	D38999 Wall Mount, 4 x RF	4 x SMA	2 feet	Fig 1 *	0.55	-	-	-
DC-3 GHz, 11 x SMA, Wall Mount MIL38999								
MF05-1.0-D38999(11xSTW/G11)-SMA(11xST/M)-M-3G	D38999 Wall Mount, 11 x RF	11 x SMA	1 m	Fig 2*	0.82	-	-	-
MF05-2.0-D38999(11xSTW/G11)-SMA(11xST/M)-M-3G	D38999 Wall Mount, 11 x RF	11 x SMA	2 m	Fig 2*	1.44	-	-	-
MF05-5.0-D38999(11xSTW/G11)-SMA(11xST/M)-M-3G	D38999 Wall Mount, 11 x RF	11 x SMA	5 m	Fig 2*	2.69	-	-	-
MF05-1.0-D38999(11xSTW/G11)-SMA(11xST/M)-F-3G	D38999 Wall Mount, 11 x RF	11 x SMA	1 feet	Fig 2*	6.42	-	-	-
MF05-2.0-D38999(11xSTW/G11)-SMA(11xST/M)-F-3G	D38999 Wall Mount, 11 x RF	11 x SMA	2 feet	Fig 2*	0.55	-	-	-

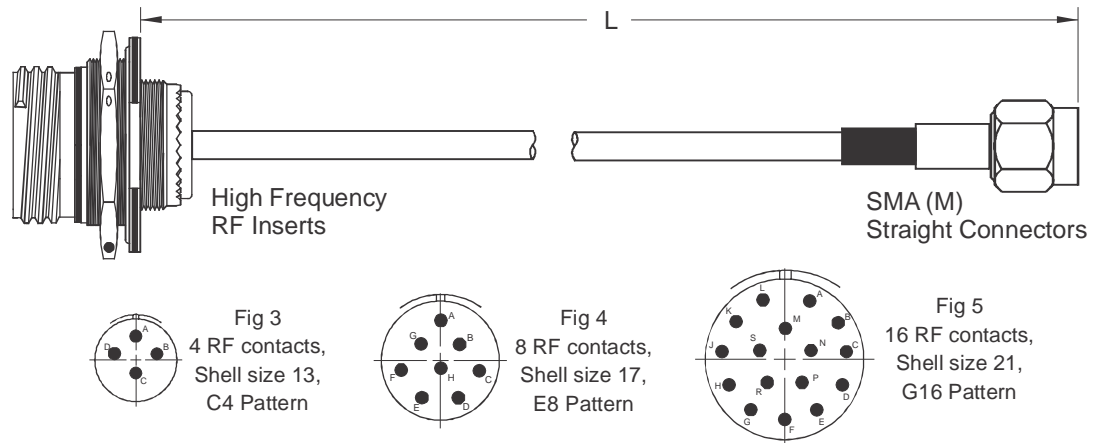
* For detailed mechanical dimensions, panel cutouts refer to standard MIL-38999 Series III connectors

* Other connectors like TNC, N, BMA etc available - substitute instead of SMA in P/N

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D38999-SMA/TNC/N Breakout RF Cable Set Ordering Codes - DC-0.5 GHz



Ordering Code	Connector 1	Connector 2	Length	Insert Pattern	Insertion Loss (dB)			
					0.5 GHz			
DC-0.5 GHz, 4 x SMA, Wall Mount MIL38999								
MF05-1.0-D38999(4xST/W/C4)-SMA(4xST/M)-M-0.5G	D38999 Wall Mount, 4 x RF	4 x SMA	1 m	Fig 3*	0.33	-	-	-
MF05-2.0-D38999(4xST/W/C4)-SMA (4xST/M)-M-0.5G	D38999 Wall Mount, 4 x RF	4 x SMA	2 m	Fig 3*	0.58	-	-	-
MF05-5.0-D38999(4xST/W/C4)-SMA(4xST/M)-M-0.5G	D38999 Wall Mount, 4 x RF	4 x SMA	5 m	Fig 3*	2.62	-	-	-
MF05-1.0-D38999(4xST/W/C4)-SMA(4xST/M)-F-0.5G	D38999 Wall Mount, 4 x RF	4 x SMA	1 feet	Fig 3*	0.22	-	-	-
MF05-2.0-D38999(4xST/W/C4)-SMA(4xST/M)-F-0.5G	D38999 Wall Mount, 4 x RF	4 x SMA	2 feet	Fig 3*	0.37	-	-	-
DC-0.5 GHz, 8 x SMA, Wall Mount MIL38999								
MF05-1.0-D38999(8xST/W/E8)-SMA(8xST/M)-M-0.5G	D38999 Wall Mount, 8 x RF	8 x SMA	1 m	Fig 4*	0.33	-	-	-
MF05-2.0-D38999(8xST/W/E8)-SMA (8xST/M)-M-0.5G	D38999 Wall Mount, 8 x RF	8 x SMA	2 m	Fig 4*	0.58	-	-	-
MF05-5.0-D38999(8xST/W/E8)-SMA(8xST/M)-M-0.5G	D38999 Wall Mount, 8 x RF	8 x SMA	5 m	Fig 4*	2.62	-	-	-
MF05-1.0-D38999(8xST/W/E8)-SMA(8xST/M)-F-0.5G	D38999 Wall Mount, 8 x RF	8 x SMA	1 feet	Fig 4*	0.22	-	-	-
MF05-2.0-D38999(8xST/W/E8)-SMA(8xST/M)-F-0.5G	D38999 Wall Mount, 8 x RF	8 x SMA	2 feet	Fig 4*	0.37	-	-	-
DC-0.5 GHz, 16 x SMA, Wall Mount MIL38999								
MF05-1.0-D38999(16xST/W/G16)-SMA(16xST/M)-M-0.5G	D38999 Wall Mount, 16 x RF	16 x SMA	1 m	Fig 5*	0.33	-	-	-
MF05-2.0-D38999(16xST/W/G16)-SMA (16xST/M)-M-0.5G	D38999 Wall Mount, 16 x RF	16 x SMA	2 m	Fig 5*	0.58	-	-	-
MF05-5.0-D38999(16xST/W/G16)-SMA(16xST/M)-M-0.5G	D38999 Wall Mount, 16 x RF	16 x SMA	5 m	Fig 5*	2.62	-	-	-
MF05-1.0-D38999(16xST/W/G16)-SMA(16xST/M)-F-0.5G	D38999 Wall Mount, 16 x RF	16 x SMA	1 feet	Fig 5*	0.22	-	-	-
MF05-2.0-D38999(16xST/W/G16)-SMA(16xST/M)-F-0.5G	D38999 Wall Mount, 16 x RF	16 x SMA	2 feet	Fig 5*	0.37	-	-	-

* For detailed mechanical dimensions, panel cutouts refer to standard MIL-38999 Series III connectors

* Other connectors like TNC, N, BMA etc available - substitute instead of SMA in P/N

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Specifications for D38999-D38999 RF Coaxial Cable Sets

Length Connector 1 Connector 2

- Should be flexible, easily routable
- Cable conforms to MIL standards MIL-C-17 and connectors to MIL-38999 Series III

Cable Electrical Specifications

- Impedance : 50 ohms
- Frequency : DC~18 GHz
- Velocity of Propagation : 70 %
- Shielding Effectiveness : better than -90 dB
- Power Handling : > 55 Watts Average @3 GHz
> 25 Watts Average @10 GHz
> 15 Watts Average @18 GHz
- Insertion Loss : < 0.40 dB/feet @3 GHz
< 0.82 dB/feet @10 GHz
< 1.12 dB/feet @18 GHz
- VSWR: : < 1.5 (DC~0.5 Ghz type)
< 1.45 (DC~3 Ghz types)
< 1.40 (DC~18 Ghz types)

Cable Physical & Mechanical Specifications

- Construction : Double shielded type
- Inner Conductor : Silver Covered Copper Wire
- Dielectric : PTFE
- Inner Shield : Silver Plated Copper Flat Ribbon Tape
- Outer Shield : Silver-Plated Copper Braid
- Jacket : Rugged Fluorinated Ethylene Propylene (FEP)
suitable for harsh environment
- Overall diameter : < 2.8 mm
- Bending Radius : < 20 mm repeated, <6mm static
- Temperature Range : -55°C ~ +125°C

Specifications of D38999 Series III series connectors

- Connectors : MIL-38999 Series III, QPL listed
- Connector make : Reputed make like Deutsch, Aero Inc etc
- Shell Material : Aluminium Alloy
- Shell Plating : Olive drab cadmium
- Insulator : Thermoplastic or thermoset
- Endurance : 500 mating / unmating operations
- Shock : 300G for 3 ms
- Vibration : 60G sine, 44G random
- Temperature Range : -65 to +200°C
- Insulation Resistance : >5000 MΩ (at 500Vdc)

Specifications for D38999-SMA Breakout RF Coaxial Cable Sets

Length Connector 1 Connector 2

- Should be flexible, easily routable
- Cable conforms to MIL standards MIL-C-17 and connectors to MIL-38999 Series III

Cable Electrical Specifications

- Impedance : 50 ohms
- Frequency : DC~18 GHz
- Velocity of Propagation : 70 %
- Shielding Effectiveness : better than -90 dB
- Power Handling : > 55 Watts Average @3 GHz
> 25 Watts Average @10 GHz
> 15 Watts Average @18 GHz
- Insertion Loss : < 0.40 dB/feet @3 GHz
< 0.82 dB/feet @10 GHz
< 1.12 dB/feet @18 GHz
- VSWR: : < 1.5 (DC~0.5 Ghz type)
< 1.45 (DC~3 Ghz types)
< 1.40 (DC~18 Ghz types)

Cable Physical & Mechanical Specifications

- Construction : Double shielded type
- Inner Conductor : Silver Covered Copper Wire
- Dielectric : PTFE
- Inner Shield : Silver Plated Copper Flat Ribbon Tape
- Outer Shield : Silver-Plated Copper Braid
- Jacket : Rugged Fluorinated Ethylene Propylene (FEP)
suitable for harsh environment
- Overall diameter : < 2.8 mm
- Bending Radius : < 20 mm repeated, <6mm static
- Temperature Range : -55°C ~ +125°C

Connector Specifications (SMA, N, TNC)

- Outer Conductor : Brass/Stainless Steel, Gold plated
- Center Conductor : Brass, Gold Plated
- Insulation : PTFE
- Frequency range : DC~18 GHz for SMA straight, DC~11 GHz for SMA right angle
- Frequency range : DC~11 GHz for N and TNC straight
- Meet test conditions of MIL-STD-202 for vibration, mechanical shock, corrosion, humidity, temperature cycling

Specifications of D38999 Series III series connectors

- Connectors : MIL-38999 Series III, QPL listed
- Connector make : Reputed make like Deustch, Aero Inc etc
- Shell Material : Aluminium Alloy
- Shell Plating : Olive drab cadmium
- Insulator : Thermoplastic or thermoset
- Endurance : 500 mating / unmating operations
- Shock : 300G for 3 ms
- Vibration : 60G sine, 44G random
- Temperature Range : -65 to +200°C
- Insulation Resistance : >5000 MΩ (at 500Vdc)