

F4TDM-CC

7-16 DIN Male for 1/2 in FSJ4-50B cable

OBSOLETE

This product was discontinued on: February 5, 2007

Replaced By:

F4DF-PSB	7-16 DIN Female Positive Stop™ Black Series for 1/2 in FSJ4-50B cable
F4DM-PSB	7-16 DIN Male Positive Stop™ Black Series for 1/2 in FSJ4-50B cable

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®

General Specifications

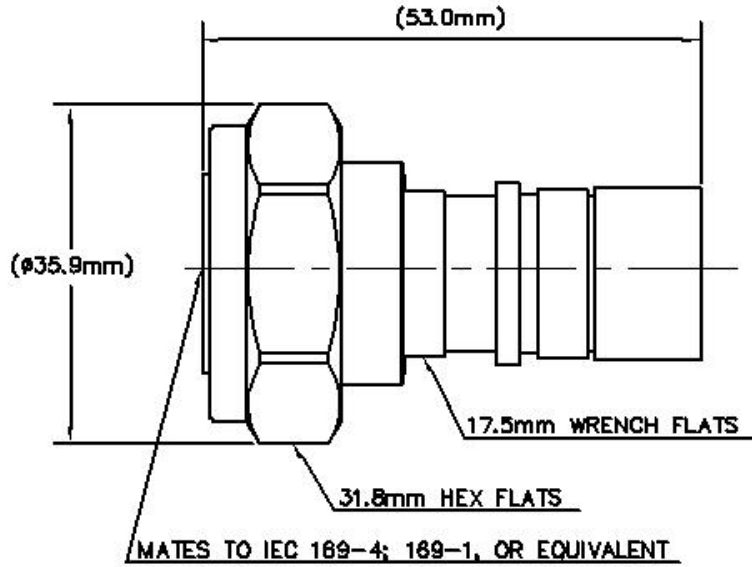
Body Style	Straight
Cable Family	FSJ4-50B
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	7-16 DIN Male
Mounting Angle	Straight
Outer Contact Attachment Method	Crush-flare
Outer Contact Plating	Trimetal
Pressurizable	No

Dimensions

Length	53.09 mm 2.09 in
Diameter	36.07 mm 1.42 in
Nominal Size	1/2 in

Outline Drawing

F4TDM-CC



Electrical Specifications

3rd Order IMD at Frequency	-120 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
Insertion Loss Coefficient, typical	0.05
Average Power at Frequency	1.0 kW @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	2500 V
Inner Contact Resistance, maximum	0.8 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 8000 MHz
Outer Contact Resistance, maximum	1.5 mOhm
Peak Power, maximum	15.6 kW
RF Operating Voltage, maximum (vrms)	884 V
Shielding Effectiveness	-110 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
0–1000 MHz	1.01	46.06

F4TDM-CC

1000–2200 MHz	1.02	40.09
2200–3000 MHz	1.029	36.9

Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	889.64 N 200 lbf
Connector Retention Torque	5.42 N-m 47.998 in lb
Coupling Nut Proof Torque	24.86 N-m 220.003 in lb
Coupling Nut Retention Force	1,000.85 N 225 lbf
Coupling Nut Retention Force Method	MIL-C-39012C-3.25, 4.6.22
Insertion Force	200.17 N 45 lbf
Insertion Force Method	IEC 61169-1:15.2.4
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:9.5
Mechanical Shock Test Method	MIL-STD-202, Method 213, Test Condition I

Environmental Specifications

Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-55 °C to +85 °C (-67 °F to +185 °F)
Attenuation, Ambient Temperature	20 °C 68 °F
Average Power, Ambient Temperature	40 °C 104 °F
Corrosion Test Method	MIL-STD-1344A, Method 1001.1, Test Condition A
Immersion Depth	1 m
Immersion Test Mating	Unmated
Immersion Test Method	IEC 60529:2001, IP68
Moisture Resistance Test Method	MIL-STD-202F, Method 106F
Thermal Shock Test Method	MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C
Vibration Test Method	MIL-STD-202F, Method 204D, Test Condition B
Water Jetting Test Mating	Unmated
Water Jetting Test Method	IEC 60529:2001, IP66

Packaging and Weights

Weight, net	120 g 0.265 lb
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F4TDM-CC

* Footnotes

Insertion Loss Coefficient, typical $0.05\sqrt{\text{freq}}$ (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours