

F1HM-D



4.3-10 Male for 1/4 in FSJ1-50A cable

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®
Product Series	FSJ1-50A FSJ1-50A

General Specifications

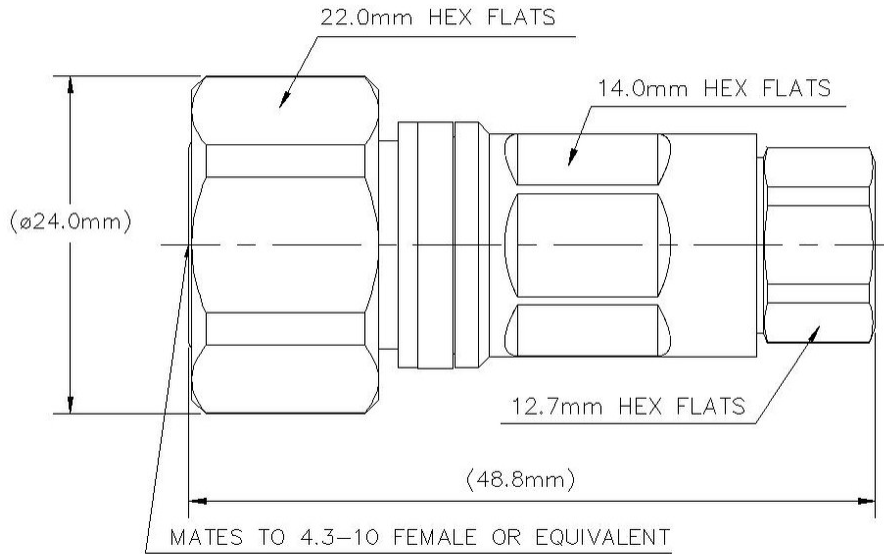
Body Style	Straight
Cable Family	FSJ1-50A
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	4.3-10 Male
Mounting Angle	Straight
Outer Contact Attachment Method	Clamp
Outer Contact Plating	Trimetal

Dimensions

Length	48.77 mm 1.92 in
Diameter	23.88 mm 0.94 in
Nominal Size	1/4 in

Outline Drawing

F1HM-D



Electrical Specifications

3rd Order IMD at Frequency	-116 dBm @ 1800 MHz
3rd Order IMD Dynamic Test Method	Two +43 dBm carriers
3rd Order IMD Dynamic, typical	-116 dB
Insertion Loss Coefficient, typical	0.05
Average Power at Frequency	600.0 W @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	1600 V
Inner Contact Resistance, maximum	0.8 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 12000 MHz
Outer Contact Resistance, maximum	1.5 mOhm
Peak Power, maximum	10 kW
RF Operating Voltage, maximum (vrms)	707 V
Shielding Effectiveness	-110 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
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F1HM-D

45–2700 MHz	1.041	33.94
2700–4000 MHz	1.052	31.92
4000–6000 MHz	1.106	25.96

Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	449.27 N 101 lbf
Coupling Nut Proof Torque	10 N-m 88.507 in lb
Coupling Nut Retention Force	449.98 N 101.16 lbf
Interface Durability	100 cycles
Interface Durability Method	IEC 61169-4:9.5
Mechanical Shock Test Method	IEC 60068-2-27

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	IEC 60068-2-11
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Moisture Resistance Test Method	IEC 60068-2-3
Thermal Shock Test Method	IEC 60068-2-14
Vibration Test Method	IEC 60068-2-6
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66

Packaging and Weights

Weight, net	64.34 g 0.142 lb
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Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value

F1HM-D

ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted
UK-ROHS	Compliant/Exempted



* 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