# F1HM-D



# Product Classification

Brand Product Type

HELIAX® Wireless and radiating connector

#### General Specifications

Interface	4.3-10 Male
Body Style	Straight
Mounting Angle	Straight

## **Electrical Specifications**

Connector Impedance	50 ohm
Operating Frequency Band	0 – 12000 MHz
Cable Impedance	50 ohm
3rd Order IMD Dynamic, typical	-116.0 dB
3rd Order IMD Dynamic Test Method	Two +43 dBm carriers
3rd Order IMD, typical	-116 dBm @ 1800 MHz
RF Operating Voltage, maximum (vrms)	707.00 V
dc Test Voltage	1600 V
Outer Contact Resistance, maximum	1.50 mOhm
Inner Contact Resistance, maximum	0.80 mOhm
Insulation Resistance, minimum	5000 MOhm
Average Power	600.0 W @ 900 MHz
Peak Power, maximum	10.00 kW
Insertion Loss, typical	0.05 dB
Shielding Effectiveness	-110 dB

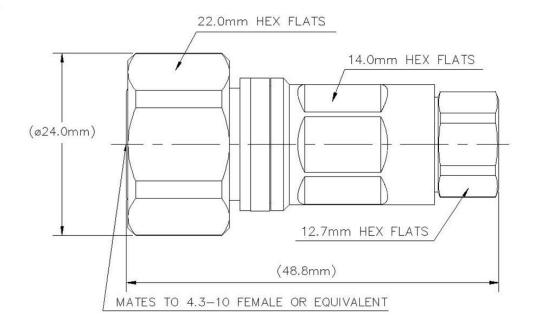
#### 4.3-10 Male for 1/4 in FSJ1-50A cable

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# Outline Drawing



## Mechanical Specifications

Outer Contact Attachment Method	Clamp
Inner Contact Attachment Method	Captivated
Outer Contact Plating	Trimetal
Inner Contact Plating	Silver
Attachment Durability	25 cycles
Interface Durability	100 cycles
Interface Durability Method	IEC 61169-4:9.5
Connector Retention Tensile Force	449 N   101 lbf
Coupling Nut Proof Torque	10.00 N-m   7.38 ft lb
Coupling Nut Retention Force	450.00 N   101.16 lbf

#### Dimensions

Nominal Size	1/4 in
Diameter	24.00 mm   0.94 in
Length	48.77 mm   1.92 in
Weight	64.34 g   0.14 lb

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#### **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)
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66
Moisture Resistance Test Method	IEC 60068-2-3
Mechanical Shock Test Method	IEC 60068-2-27
Thermal Shock Test Method	IEC 60068-2-14
Vibration Test Method	IEC 60068-2-6
Corrosion Test Method	IEC 60068-2-11

#### Standard Conditions

Attenuation, Ambient Temperature	20 °C	68 °F
Average Power, Ambient Temperature	40 °C	104 °F

#### Return Loss/VSWR

Frequency Band	VSWR	Return Loss (dB)
45–2700 MHz	1.04	34.00
2700–4000 MHz	1.05	32.00
4000–6000 MHz	1.11	26.00

#### Regulatory Compliance/Certifications

Agency	Classification
RoHS 2011/65/EU	Compliant by Exemption
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
China RoHS SJ/T 11364-2014	Above Maximum Concentration Value (MCV)



#### \* Footnotes

Immersion Depth Insertion Loss, typical Immersion at specified depth for 24 hours 0.05v<sup>-</sup>freq (GHz) (not applicable for elliptical waveguide)

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