# F4HM-F



#### Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®
Product Series	FSJ4-50B   FSJ4RK-50B
Ordering Note	CommScope® standard product (Global)
Warranty	Five years
General Specifications	
Body Style	Straight
Cable Family	FSJ4-50B
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	47.5 mm   1.87 in
Diameter	24 mm   0.945 in
Nominal Size	1/2 in

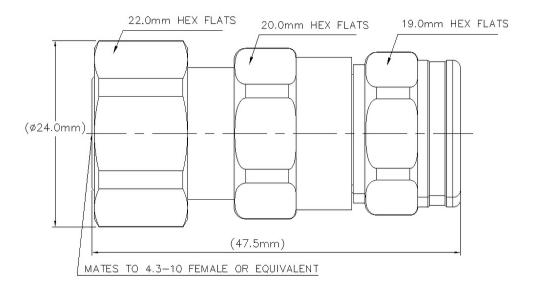
## Outline Drawing

4.3-10 Male for 1/2 in FSJ4-50B cable

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#### **Electrical Specifications**

3rd Order IMD at Frequency	-116 dBm @ 900 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
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	2000 V
Impedance	50 ohm
Inner Contact Resistance, maximum	1 m0hm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 8800 MHz
Outer Contact Resistance, maximum	1 m0hm
Peak Power, maximum	22.5 kW
RF Operating Voltage, maximum (vrms)	884 V
Shielding Effectiveness	-110 dB

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### VSWR/Return

#### Loss

Frequency Band	VSWR	Return Loss (dB)	Gated VSWR	Gated Return Loss (dB)	VSWR, typical	Return Loss, typical (dB)
0–3000 MHz	1.101	26.4	1.032	36		
3000-4000 MHz	1.253	19	1.041	34		
4000-5000 MHz	1.253	19	1.065	30		
5000-6000 MHz	1.253	19	1.106	26		
6000-8800 MHz			1.253	19	1.577	13

### Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	445 N   100.04 lbf
Connector Retention Torque	2.5 N-m   22.127 in lb
Coupling Nut Proof Torque	10 N-m   88.507 in lb
Coupling Nut Retention Force	449.27 N   101 lbf
Insertion Force	66.72 N   14.999 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	-45 °C to +85 °C (-49 °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

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## Packaging and Weights

Height, packed	248.92 mm   9.8 in	
Width, packed	266.7 mm   10.5 in	
Length, packed	266.7 mm   10.5 in	
Packaging quantity	50	
Weight, net	72.69 g   0.16 lb	
* Footnotes		
Warranty	For more information, please consult our Product Warranty guidelines	
Insertion Loss Coefficient, typical	0.05√ <sup>-</sup> freq (GHz) (not applicable for elliptical waveguide)	
Immersion Depth	Immersion at specified depth for 24 hours	

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