

# F4HM-D



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

## Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®
Product Series	FSJ4-50B   FSJ4RK-50B
Ordering Note	CommScope® standard product (Global)

## General Specifications

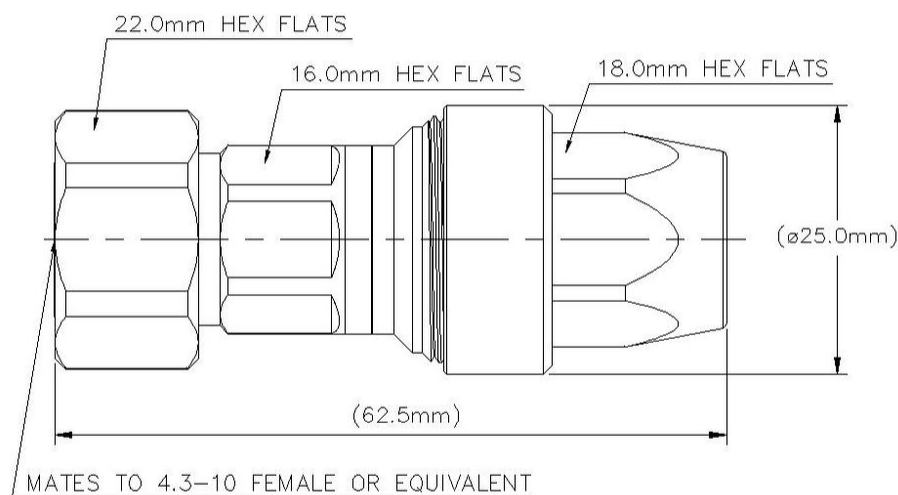
Body Style	Straight
Cable Family	FSJ4-50B
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	4.3-10 Male
Mounting Angle	Straight
Outer Contact Attachment Method	Crush-flare
Outer Contact Plating	Trimetal

## Dimensions

Length	62.48 mm   2.46 in
Diameter	24.89 mm   0.98 in
Nominal Size	1/2 in

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## Outline Drawing



## Electrical Specifications

<b>3rd Order IMD at Frequency</b>	-116 dBm @ 910 MHz
<b>3rd Order IMD Dynamic Test Method</b>	Two +43 dBm carriers
<b>3rd Order IMD Dynamic, typical</b>	-116 dB
<b>Insertion Loss, typical</b>	0.05 dB
<b>Average Power at Frequency</b>	600.0 W @ 900 MHz
<b>Cable Impedance</b>	50 ohm
<b>Connector Impedance</b>	50 ohm
<b>dc Test Voltage</b>	2500 V
<b>Inner Contact Resistance, maximum</b>	0.8 mOhm

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<b>Insulation Resistance, minimum</b>	5000 MOhm
<b>Operating Frequency Band</b>	0 – 7500 MHz
<b>Outer Contact Resistance, maximum</b>	1.5 mOhm
<b>Peak Power, maximum</b>	22.5 kW
<b>RF Operating Voltage, maximum (vrms)</b>	884 V
<b>Shielding Effectiveness</b>	-110 dB

## VSWR/Return Loss

<b>Frequency Band</b>	<b>VSWR</b>	<b>Return Loss (dB)</b>
<b>45–1000 MHz</b>	1.02	40.09
<b>1000–2700 MHz</b>	1.03	36.61
<b>2700–3800 MHz</b>	1.07	30
<b>3800–6000 MHz</b>	1.15	23.13

## Mechanical Specifications

<b>Attachment Durability</b>	25 cycles
<b>Connector Retention Tensile Force</b>	889.64 N   200 lbf
<b>Connector Retention Torque</b>	5.42 N-m   47.998 in lb
<b>Coupling Nut Proof Torque</b>	10 N-m   88.507 in lb
<b>Coupling Nut Retention Force</b>	449.27 N   101 lbf
<b>Interface Durability</b>	100 cycles
<b>Interface Durability Method</b>	IEC 61169-4:9.5
<b>Mechanical Shock Test Method</b>	IEC 60068-2-27

## Environmental Specifications

<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Attenuation, Ambient Temperature</b>	20 °C   68 °F
<b>Average Power, Ambient Temperature</b>	40 °C   104 °F
<b>Corrosion Test Method</b>	IEC 60068-2-11
<b>Immersion Depth</b>	1 m
<b>Immersion Test Mating</b>	Mated
<b>Immersion Test Method</b>	IEC 60529:2001, IP68
<b>Moisture Resistance Test Method</b>	IEC 60068-2-3

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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	100 g   0.22 lb
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## Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant



## \* Footnotes

Immersion Depth	Immersion at specified depth for 24 hours
Insertion Loss, typical	0.05√freq (GHz) (not applicable for elliptical waveguide)