F4HF-S



4.3-10 Female 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 Female
Mounting Angle	Straight
Outer Contact Attachment Method	Crush-flare
Outer Contact Plating	Trimetal
Dimensions	
Length	54.74 mm 2.155 in 66.29 mm 2.61 in
Diameter	20 mm 0.787 in 24.89 mm 0.98 in
Nominal Size	1/2 in

Outline Drawing

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F4HF-S



Electrical Specifications

3rd Order IMD at Frequency	-115 dBm @ 1800 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	2500 V
Inner Contact Resistance, maximum	0.8 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 7500 MHz
Outer Contact Resistance, maximum	1.5 mOhm
Peak Power, maximum	22.5 kW
RF Operating Voltage, maximum (vrms)	884 V
Shielding Effectiveness	-110 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)	VSWR, typical	Return Loss, typical (dB)
0–3.8 GHz	1.106	25.96		
3800-6000 MHz			1.26	19
Mechanical Specification	IS			
Attachment Durability		25 cycles		
Connector Retention Tensile Force		889.64 N 200 lbf		

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Connector Retention Torque	5.42 N-m 47.998 in lb
Coupling Nut Proof Torque	10 N-m 88.507 in lb
Coupling Nut Retention Force	449.27 N 101 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
Water Jetting Test Mating	Mated
Water Jetting Test Method	IEC 60529:2001, IP66

Packaging and Weights

Weight, net

71.7 g | 0.158 lb

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
* Footnotes	

Foolinoles

Insertion Loss Coefficient, typical	$0.05\sqrt{-}$ freq (GHz) (not applicable for elliptical waveguide)
Immersion Depth	Immersion at specified depth for 24 hours

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