

F1HR-D



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

Product Classification

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

General Specifications

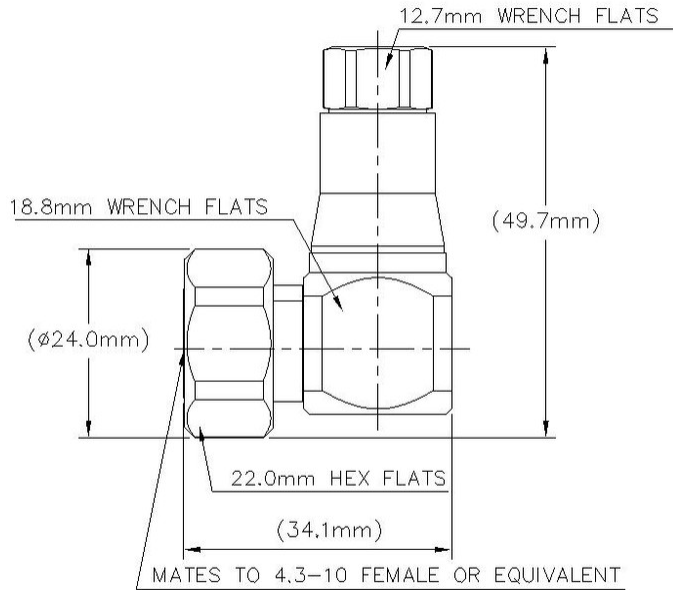
Body Style	Right angle
Cable Family	FSJ1-50A
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Silver
Interface	4.3-10 Male
Mounting Angle	Right angle
Outer Contact Attachment Method	Clamp
Outer Contact Plating	Trimetal

Dimensions

Length	49.78 mm 1.96 in
Diameter	23.88 mm 0.94 in
Nominal Size	1/4 in

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Outline Drawing



Electrical Specifications

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 – 6000 MHz
Outer Contact Resistance, maximum	1.5 mOhm
Peak Power, maximum	10 kW
RF Operating Voltage, maximum (vrms)	707 V
Shielding Effectiveness	-110 dB

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VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45–2700 MHz	1.025	38.17
2700–4000 MHz	1.052	31.92
4000–6000 MHz	1.083	27.99

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	96.61 g 0.213 lb
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Regulatory Compliance/Certifications

Agency

ISO 9001:2015

**Classification**

Designed, manufactured and/or distributed under this quality management system

* Footnotes

Insertion Loss Coefficient, typical $0.05\sqrt{\text{freq}} \text{ (GHz)}$ (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours