Product Specifications

F4NR-HC

Type N Male Right Angle for 1/2 in FSJ4-50B cable

Product Classification

Brand	HELIAX®
Product Type	Wireless and radiating connector

General Specifications

Interface	N Male
Body Style	Right angle
Brand	HELIAX®
Mounting Angle	Right angle
Ordering Note	CommScope® standard product in Asia Pacific | CommScope® standard product in Europe, the Middle East, and Africa

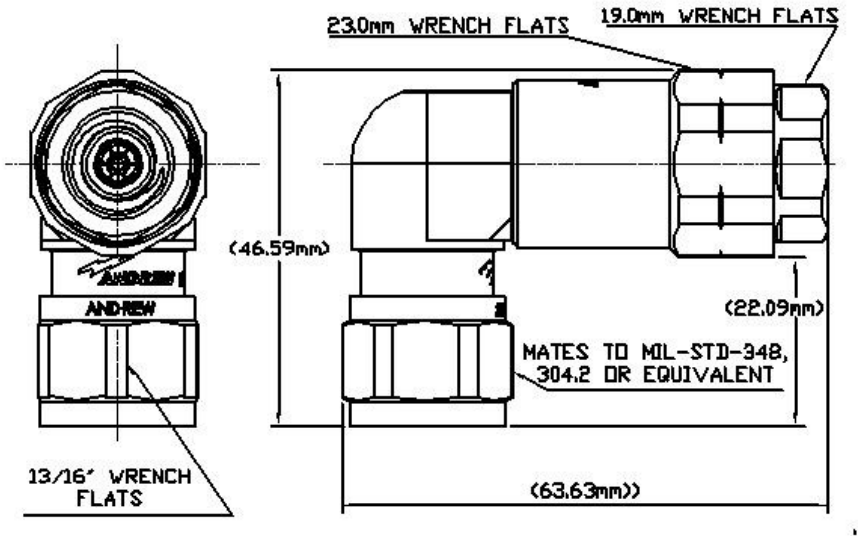
Electrical Specifications

Connector Impedance	50 ohm
Operating Frequency Band	0 – 10200 MHz
Cable Impedance	50 ohm
3rd Order IMD, typical	-116 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
RF Operating Voltage, maximum (vrms)	707.00 V
dc Test Voltage	2000 V
Outer Contact Resistance, maximum	0.30 mOhm
Inner Contact Resistance, maximum	2.00 mOhm
Insulation Resistance, minimum	5000 MOhm
Average Power	0.6 kW @ 900 MHz
Peak Power, maximum	10.00 kW
Insertion Loss, typical	0.05 dB
Shielding Effectiveness	-110 dB

Product Specifications

F4NR-HC

Outline Drawing



Mechanical Specifications

Outer Contact Attachment Method	Self-flare
Inner Contact Attachment Method	Captivated
Outer Contact Plating	Trimetal
Inner Contact Plating	Gold | Silver
Interface Durability	500 cycles
Interface Durability Method	IEC 61169-4:9.5
Connector Retention Tensile Force	445 N | 100 lbf
Connector Retention Torque	5.42 N-m | 48.00 in lb
Pressurizable	No
Coupling Nut Proof Torque	4.52 N-m | 40.00 in lb
Coupling Nut Retention Force	444.82 N | 100.00 lbf
Coupling Nut Retention Force Method	MIL-C-39012C-3.23, 4.6.22

Dimensions

Nominal Size	1/2 in
Height	46.59 mm | 1.83 in
Length	63.63 mm | 2.51 in
Right Angle Length	22.10 mm | 0.87 in
Weight	160.90 g | 0.35 lb
Width	24.50 mm | 0.96 in

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

Product Specifications

F4NR-HC

Immersion Test Mating	Unmated
Immersion Test Method	IEC 60529:2001, IP68
Water Jetting Test Mating	Unmated
Water Jetting Test Method	IEC 60529:2001, IP66
Moisture Resistance Test Method	MIL-STD-202F, Method 106F
Mechanical Shock Test Method	MIL-STD-202F, Method 213B, Test Condition C
Thermal Shock Test Method	MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 °C
Vibration Test Method	MIL-STD-202F, Method 204D, Test Condition B
Corrosion Test Method	MIL-STD-1344A, Method 1001.1, Test Condition A

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)
50–1000 MHz	1.05	-32.00
1000–1900 MHz	1.06	-30.00
1900–2200 MHz	1.06	-30.00
2200–2700 MHz	1.08	-28.00
2700–3600 MHz	1.19	-21.00
3600–6000 MHz	1.19	-21.00
6000–8800 MHz	1.25	-19.00
8800–10200 MHz	1.29	-18.00

Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system

* Footnotes

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