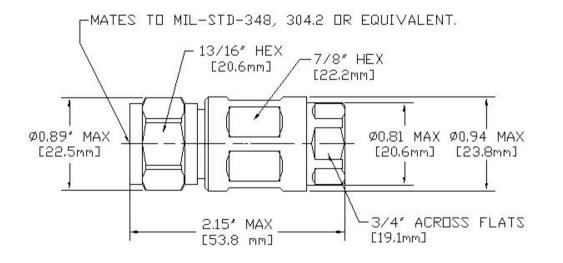


#### **Product Classification**

Product Type Wireless and radiating connector Product Brand **HELIAX®** Ordering Note CommScope® standard product (Global) **General Specifications** Body Style Straight Cable Family FSJ4-50B Captivated Inner Contact Attachment Method Gold Inner Contact Plating Interface N Male Straight Mounting Angle Outer Contact Attachment Method Crush-flare **Outer Contact Plating** Trimetal Pressurizable No Dimensions Length 54.1 mm | 2.13 in Diameter 24.13 mm | 0.95 in Nominal Size 1/2 in

### Outline Drawing

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



### **Electrical Specifications**

3rd Order IMD at Frequency	-120 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
Insertion Loss, typical	0.05 dB
Average Power at Frequency	0.6 kW @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	2000 V
Inner Contact Resistance, maximum	2 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 12000 MHz
Outer Contact Resistance, maximum	0.3 mOhm

Peak Power, maximum		10 kW
RF Operating Voltage, maximum (vrms	)	707 V
Shielding Effectiveness		-110 dB
VSWR/Return Loss		
Frequency Band	VSWR	Return Loss (dB)
0–1000 MHz	1.04	36
1010–2000 MHz	1.04	35
2010–3000 MHz	1.09	28
Mechanical Specifications		
Attachment Durability		25 cycles
Connector Retention Tensile Force		889.64 N   200 lbf
Connector Retention Torque		5.42 N-m   47.998 in lb
Coupling Nut Proof Torque		4.52 N-m   39.997 in lb
Coupling Nut Retention Force		444.82 N   100 lbf
Coupling Nut Retention Force Method		MIL-C-39012C-3.25, 4.6.22
Insertion Force		66.72 N   15 lbf
Insertion Force Method		MIL-C-39012C-3.12, 4.6.9
Interface Durability		500 cycles
Interface Durability Method		IEC 61169-16:9.5
Mechanical Shock Test Method		MIL-STD-202F, Method 213B, Test Condition C

### 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	MIL-STD-1344A, Method 1001.1, Test Condition A
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Moisture Resistance Test Method	MIL-STD-202F, Method 106F
Thermal Shock Test Method	MIL-STD-202F, Method 107G, Test Condition A-1, Low Temperature -55 $^\circ\mathrm{C}$

Vibration Test Method Water Jetting Test Mating MIL-STD-202F, Method 204D, Test Condition B

Mated

Water Jetting Test Method

IEC 60529:2001, IP66

#### Packaging and Weights

Weight, net

 $90.72 \; g \;\; \mid \;\; 0.2 \; lb$ 

### 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 www.commscope.com/ProductCompliance
ROHS	Compliant



### \* Footnotes

Immersion Depth	Immersion at specified depth for 24 hours
Insertion Loss, typical	0.05# <sup>-</sup> freq (GHz) (not applicable for elliptical waveguide)