

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

Product Classification

Product Type Wireless and radiating connector

Product Brand HELIAX®

Ordering Note CommScope® standard product (Global)

General Specifications

Body StyleStraightCable FamilyFSJ4-50BInner Contact Attachment MethodCaptivatedInner Contact PlatingGold

Interface N Male

Mounting Angle Straight

Outer Contact Attachment Method Crush-flare

Outer Contact Plating Trimetal

Pressurizable No

Dimensions

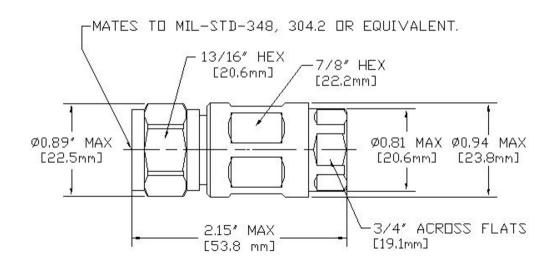
 Length
 54.1 mm | 2.13 in

 Diameter
 24.13 mm | 0.95 in

Nominal Size 1/2 in

Outline Drawing





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 m0hm Insulation Resistance, minimum 5000 MOhm **Operating Frequency Band** 0 - 12000 MHz **Outer Contact Resistance, maximum** 0.3 m0hm Peak Power, maximum 10 kW RF Operating Voltage, maximum (vrms) 707 V

VSWR/Return Loss

Shielding Effectiveness

Frequency Band VSWR Return Loss (dB)

-110 dB

0–1000 MHz 1.04 36

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1010–2000 MHz 1.04 35 **2010–3000 MHz** 1.09 28

Mechanical Specifications

Attachment Durability 25 cycles

Connector Retention Tensile Force889.64 N | 200 lbfConnector Retention Torque5.42 N-m | 47.998 in lbCoupling Nut Proof Torque4.52 N-m | 39.997 in lbCoupling Nut Retention Force444.82 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 $20 \, ^{\circ}\text{C} \mid 68 \, ^{\circ}\text{F}$ Average Power, Ambient Temperature $40 \, ^{\circ}\text{C} \mid 104 \, ^{\circ}\text{F}$

Corrosion Test Method MIL-STD-1344A, Method 1001.1, Test Condition A

Immersion Depth1 mImmersion Test MatingMated

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 °C

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

Water Jetting Test Mating Mated

Water Jetting Test Method IEC 60529:2001, IP66

Packaging and Weights

Weight, net 90.72 g | 0.2 lb



Regulatory Compliance/Certifications

Agency Classification

CHINA-ROHS Above maximum concentration value

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

ROHS Compliant/Exempted



* Footnotes

Insertion Loss, typical 0.05v⁻freq (GHz) (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours

