

TNC Male for 1/4 in FS31-50A cable

Product Classification

Product Type Wireless and radiating connector

Product Brand HELIAX® Product Series FSJ1-50A

General Specifications

Body Style Straight **Cable Family** FSJ1-50A **Inner Contact Attachment Method** Captivated **Inner Contact Plating** Gold

Interface TNC Male **Mounting Angle** Straight Tab-flare **Outer Contact Attachment Method Outer Contact Plating** Trimetal **Pressurizable** No

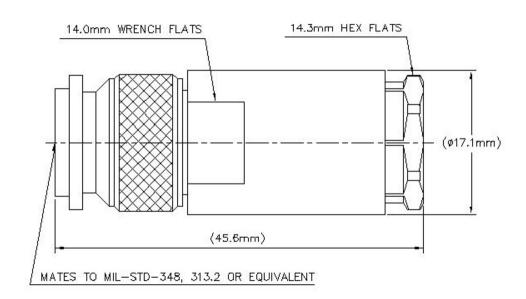
Dimensions

Height 17.02 mm | 0.67 in Width 17.02 mm | 0.67 in Length 45.72 mm | 1.8 in Diameter 17.02 mm | 0.67 in

Nominal Size 1/4 in

Outline Drawing





Electrical Specifications

Average Power at Frequency 0.4 kW @ 900 MHz

Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage1500 VInner Contact Resistance, maximum1.5 mOhm

Insulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 18000 MHz

Outer Contact Resistance, maximum 0.4 mOhm

Peak Power, maximum 5 kW

RF Operating Voltage, maximum (vrms) 500 V

Shielding Effectiveness -110 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45-1800 MHz	1.07	30
1800-3600 MHz	1.09	28
3600-9000 MHz	1.18	22
9000-16200 MHz	1.23	20

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16200–18000 MHz 1.5 14

Mechanical Specifications

Connector Retention Tensile Force 449.27 N | 101 lbf

Coupling Nut Proof Torque 1.7 N-m | 15.046 in lb

Coupling Nut Proof Torque Method IEC 61169-16:9.3.11

Coupling Nut Retention Force 445 N | 100.04 lbf

Coupling Nut Retention Force Method IEC 61169-17:9.3.11

Insertion Force 66.72 N | 15 lbf

Insertion Force Method IEC 61169-16:9.3.5

Interface Durability 500 cycles

Interface Durability Method IEC 61169-4:17

Mechanical Shock Test Method IEC 60068-2-27

Environmental Specifications

Operating Temperature $-55 \,^{\circ}\text{C} \text{ to } +85 \,^{\circ}\text{C} \, (-67 \,^{\circ}\text{F to } +185 \,^{\circ}\text{F})$

Storage Temperature $-65 \,^{\circ}\text{C}$ to $+125 \,^{\circ}\text{C}$ (-85 $^{\circ}\text{F}$ to $+257 \,^{\circ}\text{F}$)

Attenuation, Ambient Temperature 20 °C | 68 °F

Average Power, Ambient Temperature 40 °C | 104 °F

Average Power, Inner Conductor Temperature 100 °C | 212 °F

Corrosion Test Method IEC 60068-2-11

Moisture Resistance Test Method IEC 60068-2-3

Thermal Shock Test Method IEC 60068-2-14

Vibration Test Method IEC 60068-2-6

Packaging and Weights

Weight, net 62 g | 0.137 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





