

#### Type N Female for 3/8 in FSJ2 and PTS2 cable

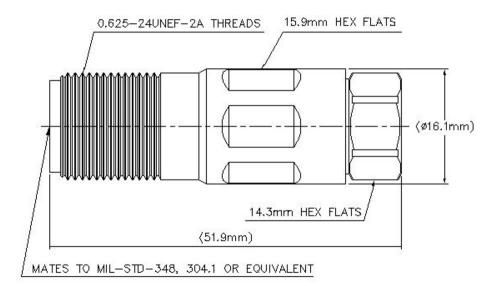
### Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®
Product Series	FSJ2-50
General Specifications	
Body Style	Straight
Cable Family	FSJ2-50
Inner Contact Attachment Method	Captivated
Inner Contact Plating	Gold
Interface	N Female
Mounting Angle	Straight
Outer Contact Attachment Method	Self-flare
Outer Contact Plating	Silver
Pressurizable	No
Dimensions	
Length	51.82 mm   2.04 in
Diameter	16.26 mm   0.64 in
Nominal Size	3/8 in

## Outline Drawing

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## Electrical Specifications

3rd Order IMD Test MethodTwo +43 dBm carriersAverage Power at Frequency0.7 kW @ 900 MHzCable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage2300 VInner Contact Resistance, maximum1 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum10 kWRF Operating Voltage, maximum (vrms)707 VShielding Effectiveness-110 dB	3rd Order IMD at Frequency	-112 dBm @ 910 MHz
Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage2300 VInner Contact Resistance, maximum1 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum10 kWRF Operating Voltage, maximum (vrms)707 V	3rd Order IMD Test Method	Two +43 dBm carriers
Connector Impedance50 ohmdc Test Voltage2300 VInner Contact Resistance, maximum1 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum10 kWRF Operating Voltage, maximum (vrms)707 V	Average Power at Frequency	0.7 kW @ 900 MHz
dc Test Voltage2300 VInner Contact Resistance, maximum1 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum10 kWRF Operating Voltage, maximum (vrms)707 V	Cable Impedance	50 ohm
Inner Contact Resistance, maximum1 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum10 kWRF Operating Voltage, maximum (vrms)707 V	Connector Impedance	50 ohm
Insulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum10 kWRF Operating Voltage, maximum (vrms)707 V	dc Test Voltage	2300 V
Operating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum10 kWRF Operating Voltage, maximum (vrms)707 V	Inner Contact Resistance, maximum	1 m0hm
Outer Contact Resistance, maximum0.25 mOhmPeak Power, maximum10 kWRF Operating Voltage, maximum (vrms)707 V	Insulation Resistance, minimum	5000 MOhm
Peak Power, maximum10 kWRF Operating Voltage, maximum (vrms)707 V	Operating Frequency Band	0 – 6000 MHz
<b>RF Operating Voltage, maximum (vrms)</b> 707 V	Outer Contact Resistance, maximum	0.25 mOhm
······································	Peak Power, maximum	10 kW
Shielding Effectiveness -110 dB	RF Operating Voltage, maximum (vrms)	707 V
	Shielding Effectiveness	-110 dB

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45–3000 MHz	1.052	31.92
3000–5000 MHz	1.173	21.98

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5000-10000 MHz

1.38

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# Mechanical Specifications

Connector Retention Tensile Force	671.68 N   151 lbf
Connector Retention Torque	2.7 N-m   23.897 in lb
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 61169-16:9.3.11
Insertion Force	124.55 N   28 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 °C to +85 °C (-67 °F to +185 °F)
Storage Temperature	-65 °C to +125 °C (-85 °F to +257 °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
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

#### Packaging and Weights

Weight, net

19g | 0.042 lb

### Regulatory Compliance/Certifications

Agency

Classification

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# F2PNF-C

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
UK-ROHS	Compliant



**Immersion Depth** 

Immersion at specified depth for 24 hours

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