# F1PNF-BHC



#### Type N Female Bulkhead for 1/4 in FSJ1-50A cable

### Product Classification

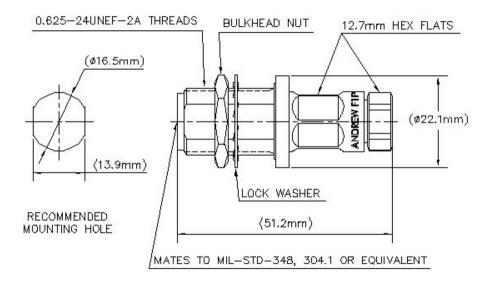
Product Type	Wireless and radiating connector
Product Brand	HELIAX®
Product Series	FSJ1-50A
General Specifications	
Body Style	Bulkhead
Cable Family	FSJ1-50A
Inner Contact Plating	Silver
Interface	N Female
Mounting Angle	Straight
Outer Contact Plating	Trimetal
Pressurizable	No
Dimensions	
Height	22.1 mm   0.87 in
Width	22.1 mm   0.87 in
Length	51.05 mm   2.01 in
Diameter	22.1 mm   0.87 in
Nominal Size	1/4 in

# Outline Drawing

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## **Electrical Specifications**

3rd Order IMD Test MethodTwo +43 dBm carriersAverage Power at Frequency0.4 kW @ 900 MHzCable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage1600 VInner Contact Resistance, maximum1 mOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum6.4 kWRF Operating Voltage, maximum (vrms)565 VShielding Effectiveness-110 dB	3rd Order IMD at Frequency	-112 dBm @ 910 MHz
Cable Impedance50 ohmConnector Impedance50 ohmdc Test Voltage1600 VInner Contact Resistance, maximum1 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum6.4 kWRF Operating Voltage, maximum (vrms)565 V	3rd Order IMD Test Method	Two +43 dBm carriers
Connector Impedance50 ohmdc Test Voltage1600 VInner Contact Resistance, maximum1 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum6.4 kWRF Operating Voltage, maximum (vrms)565 V	Average Power at Frequency	0.4 kW @ 900 MHz
dc Test Voltage1600 VInner Contact Resistance, maximum1 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum6.4 kWRF Operating Voltage, maximum (vrms)565 V	Cable Impedance	50 ohm
Inner Contact Resistance, maximum1 mOhmInsulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum6.4 kWRF Operating Voltage, maximum (vrms)565 V	Connector Impedance	50 ohm
Insulation Resistance, minimum5000 MOhmOperating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum6.4 kWRF Operating Voltage, maximum (vrms)565 V	dc Test Voltage	1600 V
Operating Frequency Band0 - 6000 MHzOuter Contact Resistance, maximum0.25 mOhmPeak Power, maximum6.4 kWRF Operating Voltage, maximum (vrms)565 V	Inner Contact Resistance, maximum	1 m0hm
Outer Contact Resistance, maximum0.25 mOhmPeak Power, maximum6.4 kWRF Operating Voltage, maximum (vrms)565 V	Insulation Resistance, minimum	5000 MOhm
Peak Power, maximum6.4 kWRF Operating Voltage, maximum (vrms)565 V	Operating Frequency Band	0 – 6000 MHz
<b>RF Operating Voltage, maximum (vrms)</b> 565 V	Outer Contact Resistance, maximum	0.25 mOhm
	Peak Power, maximum	6.4 kW
Shielding Effectiveness -110 dB	RF Operating Voltage, maximum (vrms)	565 V
	Shielding Effectiveness	-110 dB

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
824–2700 MHz	1.041	33.94
3000–6000 MHz	1.26	19

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### 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 61169-16:9.3.11
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
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

59.2 g | 0.131 lb

## Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on www.andrew.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant

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