

F1PR-PNMNF-2



HS1RP-50A Jumper with interface types N Female and N Male, 0.61 m

OBSOLETE

This product was discontinued on: March 20, 2017

Product Classification

Product Type	Wireless transmission cable assembly
Product Brand	HELIAX®
Product Series	HS1RP-50A

General Specifications

Body Style, Connector A	Straight
Body Style, Connector B	Straight
Interface, Connector A	N Female
Interface, Connector B	N Male
Specification Sheet Revision Level	A

Dimensions

Length	0.61 m 2.001 ft
Nominal Size	1/4 in

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
700–3000 MHz	1.288	18

Jumper Assembly Sample Label

F1PR-PNMNF-2



Environmental Specifications

Immersion Test Method Meets IEC 60529:2001, IP68 in mated condition

Regulatory Compliance/Certifications

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



Included Products

- F1PNF – Type N Female for 1/4 in FSJ1-50A cable
- F1PNM-H – Type N Male for 1/4 in FSJ1-50A cable

F1PNF



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

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®
Product Series	FSJ1-50A

General Specifications

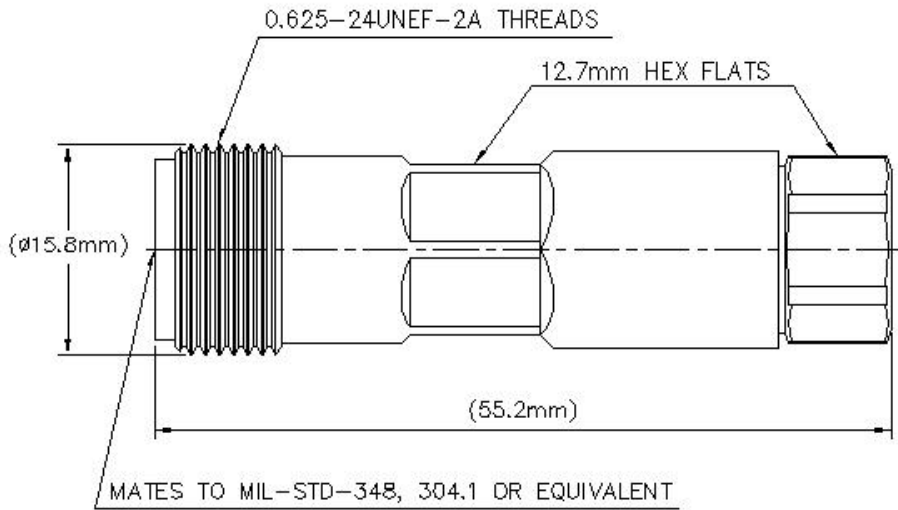
Body Style	Straight
Cable Family	FSJ1-50A
Inner Contact Attachment Method	Solder
Inner Contact Plating	Gold
Interface	N Female
Mounting Angle	Straight
Outer Contact Attachment Method	Self-clamping
Outer Contact Plating	Silver
Pressurizable	No

Dimensions

Height	15.75 mm 0.62 in
Width	15.75 mm 0.62 in
Length	55.12 mm 2.17 in
Diameter	15.75 mm 0.62 in
Nominal Size	1/4 in

Outline Drawing

F1PNF



Electrical Specifications

3rd Order IMD at Frequency	-112 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
Average Power at Frequency	0.4 kW @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	1600 V
Inner Contact Resistance, maximum	1 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 8000 MHz
Outer Contact Resistance, maximum	0.25 mOhm
Peak Power, maximum	6.4 kW
RF Operating Voltage, maximum (vrms)	565 V
Shielding Effectiveness	-110 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
45–4100 MHz	1.119	25.01
4100–6200 MHz	1.173	21.98

F1PNF

6200–11000 MHz

1.433

14.99

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
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	100.46 g 0.221 lb
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Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Below maximum concentration value

F1PNF

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



* Footnotes

Immersion Depth	Immersion at specified depth for 24 hours
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F1PNM-H



Type N Male for 1/4 in FSJ1-50A cable

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®

General Specifications

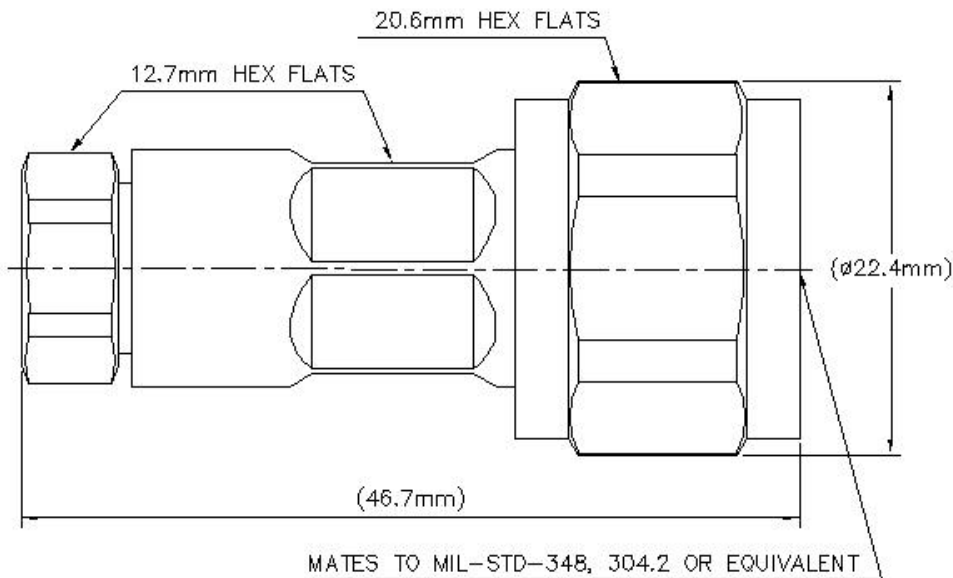
Body Style	Straight
Cable Family	FSJ1-50A
Inner Contact Attachment Method	Solder
Inner Contact Plating	Gold
Interface	N Male
Mounting Angle	Straight
Outer Contact Attachment Method	Self-clamping
Outer Contact Plating	Silver
Pressurizable	No

Dimensions

Height	20.57 mm 0.81 in
Width	20.57 mm 0.81 in
Length	46.74 mm 1.84 in
Diameter	20.57 mm 0.81 in
Nominal Size	1/4 in

Outline Drawing

F1PNM-H



Electrical Specifications

3rd Order IMD at Frequency	-112 dBm @ 910 MHz
3rd Order IMD Test Method	Two +43 dBm carriers
Average Power at Frequency	0.4 kW @ 900 MHz
Cable Impedance	50 ohm
Connector Impedance	50 ohm
dc Test Voltage	1600 V
Inner Contact Resistance, maximum	1 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 6000 MHz
Outer Contact Resistance, maximum	0.25 mOhm
Peak Power, maximum	6.4 kW
RF Operating Voltage, maximum (vrms)	565 V
Shielding Effectiveness	-110 dB

Mechanical Specifications

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Coupling Nut Proof Torque	1.7 N-m 15.046 in lb
Coupling Nut Proof Torque Method	IEC 61169-16:9.3.11

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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)
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Average Power, Ambient Temperature	40 °C 104 °F
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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	80 g 0.176 lb
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