

F4NF-7570



Type N Female for 1/2 in FSJ4-75A cable

OBSOLETE

This product was discontinued on: February 16, 2016

Product Classification

Product Type	Wireless and radiating connector
Product Brand	HELIAX®

General Specifications

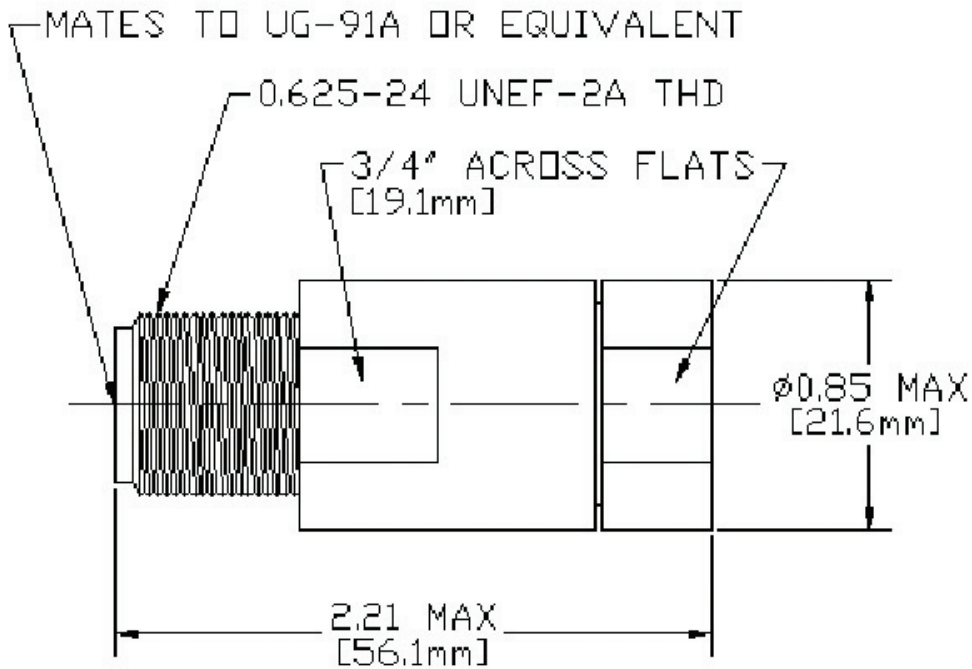
Body Style	Straight
Cable Family	FSJ4-75A
Inner Contact Attachment Method	Solder
Inner Contact Plating	Silver
Interface	N Female
Mounting Angle	Straight
Outer Contact Attachment Method	Tab-flare
Outer Contact Plating	Unplated
Pressurizable	No

Dimensions

Length	53.34 mm 2.1 in
Diameter	20.32 mm 0.8 in
Nominal Size	1/2 in

Outline Drawing

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Electrical Specifications

Insertion Loss Coefficient, typical	0.05
Average Power at Frequency	0.6 kW @ 900 MHz
Cable Impedance	75 ohm
Connector Impedance	70 ohm
dc Test Voltage	2000 V
Inner Contact Resistance, maximum	0.3 mOhm
Insulation Resistance, minimum	5000 MOhm
Operating Frequency Band	0 – 8400 MHz
Outer Contact Resistance, maximum	2 mOhm
Peak Power, maximum	10 kW
RF Operating Voltage, maximum (vrms)	707 V
Shielding Effectiveness	-110 dB

VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
3.3–4.4 GHz	1.173	21.98

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45–1100 MHz	1.058	31
1100–2200 MHz	1.106	25.96
2200–3300 MHz	1.119	25.01
4400–5500 MHz	1.33	17
5500–6600 MHz	1.433	14.99
6600–7700 MHz	1.68	12
7700–8800 MHz	1.93	10
8800–9900 MHz	1.93	10
9900–11000 MHz	2.1	9

Mechanical Specifications

Attachment Durability	25 cycles
Connector Retention Tensile Force	889.64 N 200 lbf
Connector Retention Torque	5.42 N-m 47.998 in lb
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 °C 68 °F
Average Power, Ambient Temperature	40 °C 104 °F
Corrosion Test Method	MIL-STD-1344A, Method 1001.1, Test Condition A
Immersion Depth	1 m
Immersion Test Mating	Mated
Immersion Test Method	IEC 60529:2001, IP68
Moisture Resistance Test Method	MIL-STD-202F, Method 106F
Thermal Shock Test Method	MIL-STD-202, Method 107, 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

F4NF-7570

Weight, net

64 g | 0.141 lb

* Footnotes

Insertion Loss Coefficient, typical $0.05\sqrt{\text{freq (GHz)}}$ (not applicable for elliptical waveguide)

Immersion Depth Immersion at specified depth for 24 hours