

Type N F/F Bulkhead Coaxial RF Surge Protector, DC - 6GHz,
90W, IP67, 60 V Max., 5mJ, 20kA, Gas Discharge Tube



GT-NFF-AL

Features

- Surge current of 20kA
- Max Power 90W(RMS)
- Frequency range from DC to 6 GHz
- N-type Female connectors
- Waterproof IP67 rated
- DC Pass
- VSWR <1.1:1 Typical
- CE & RoHS compliant
- Bidirectional

Applications

- WiFi
- GPS
- Land mobile radio

Description

RF surge protector (also known as lightning arrester or surge arrester) GT-NFF-AL from PolyPhaser, utilizing a gas tube (GT or GDT). This RF surge protector component is manufactured in a coaxial in-line design with wide operating frequency range. All PolyPhaser RF surge protector products are available in stock with same day shipping.

Electrical Specifications

Surge Protector Type DC Handling		Gas Discharge Tube DC Pass		
Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
Impedance		50		Ohms
VSWR			1.4:1	
Insertion Loss			0.35	dB
Operating Voltage (DC)			60	Volts
Input Power, CW	90W @ 30MHz 9W @ 3GHz		90	Watts
Surge Current			20	kA
IEC 61000-4-5 8/20μs WAVEFORM				
Turn On Voltage		300		Volts
Throughput Energy			5	mJ

Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 3	3 to 4	4 to 5.5	5.5 to 6		GHz
VSWR, Typ	1.1:1	1.2:1	1.4:1	1.4:1		
Insertion Loss, Max	0.1	0.25	0.25	0.35		dB

Mechanical Specifications

Size

Length

2.22 in [56.39 mm]

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Width/Diameter	0.86 in [21.84 mm]
Weight	0.15 lbs [68.04 g]

Configuration

Input Connector	N Female
Output Connector	N Female

Environmental Specifications

Temperature

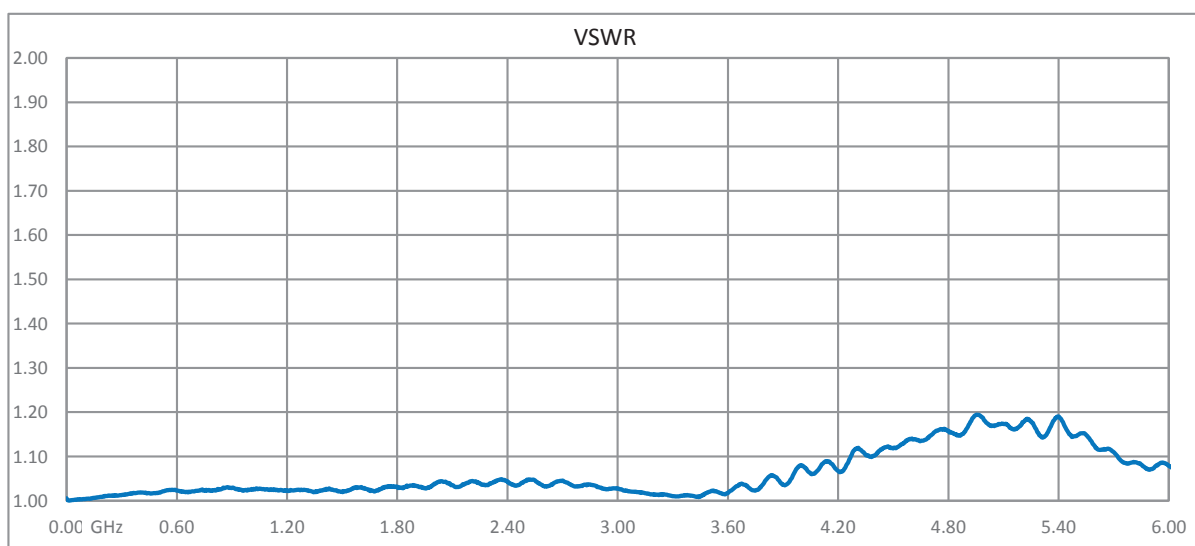
Operating Range	-55 to +85 deg C
Ingress Protection (IP) Rating	IP67

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

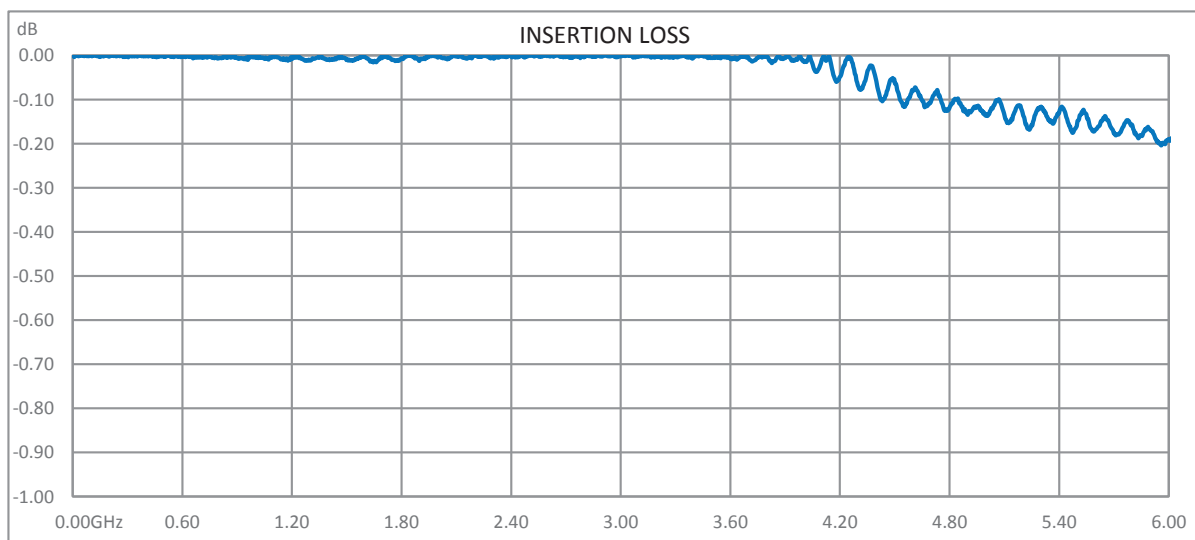
Typical Performance Data



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PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, DC Pass and Ultra Low PIM. Backed by responsive service and expert technical support PolyPhaser continually expands its product offering and services to serve engineers' urgent needs for RF components in mission critical communication networks.

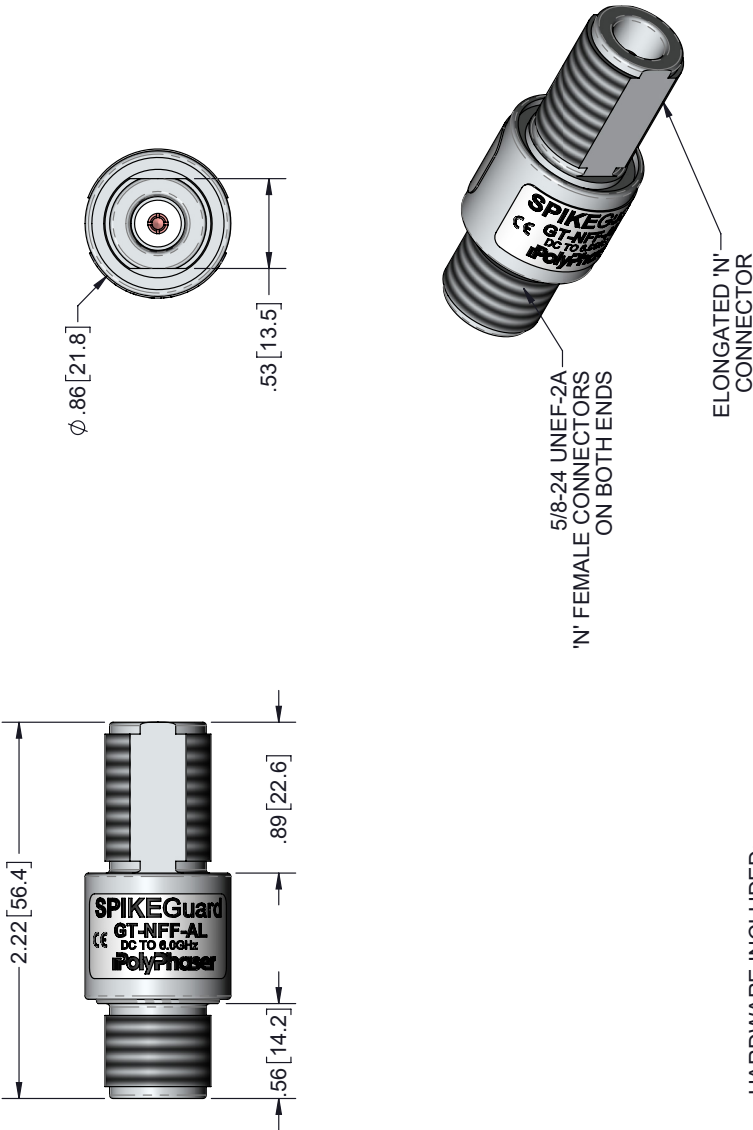
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [Type N F/F Bulkhead Coaxial RF Surge Protector, DC - 6GHz, 90W, IP67, 60 V Max., 5mJ, 20kA, Gas Discharge Tube GT-NFF-AL](https://www.polyphaser.com/type-n-surge-protector-6ghz-4ghz-gas-discharge-tube-gt-nff-al-p.aspx)

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GT-NFF-AL CAD Drawing

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HARDWARE INCLUDED:

QTY	DESCRIPTION
1	BRACKET MOUNTING AL 5052-H32
2	NUT 8-32 HEX 18-8 SS
2	WASHER #8 410 SS INTERNAL
2	SCREW 8-32x.50 PHIL MS PAN 18-8 SS
1	O-RING 016 SILICONE
1	NUT 5/8-24 303 HEX SS

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

UNLESS OTHERWISE SPECIFIED, LEADING DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE MILLIMETERS	PolyPhaser		SHEET	1	of	1
			SCALE 1:1			
TITLE						
GAS TUBE NON-REPLACEABLE						
dc-6GHz 50-100W N FEM						
THIRD-ANGLE PROJECTION						
						
TOLERANCES:						
FRACTIONS±: 1/32 .XX±.01						
ANGLES±: 1° .XXX±.005						
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