PolyPhaser
an INFINITE brand

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 <1.4:1
- CE & RoHS compliant
- Bidirectional

Applications

- WiFi
- GPS
- Land mobile radio

Description

RF surge protector (also known as lightning arrester or surge arrestor) 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	Gas Discharge Tube
DC Handling	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
Operating Current (DC)			10	A
Input Power, CW 90W @ 30MHz 9W @ 3GHz			90	Watts
Surge Current IEC 61000-4-5 8/20µs WAVEFORM			20	kA
Turn On Voltage		300		Volts
Throughput Energy			5	mJ

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications:
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Sparkover Impulse Voltage 500 Volts @ 1000V/µs	500	Volts
Sparkover Voltage (DC)	300 ±20%	Volts
Holdover Voltage 80 Volts @ <150ms	80	Volts

Specifications by Frequency

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

Mechanical Specifications

Size

Length	2.22 in [56.39 mm]
Width/Diameter	0.86 in [21.84 mm]
Weight	0.1 lbs [45.36 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

RoHS
CE

Plotted and Other Data

Notes:

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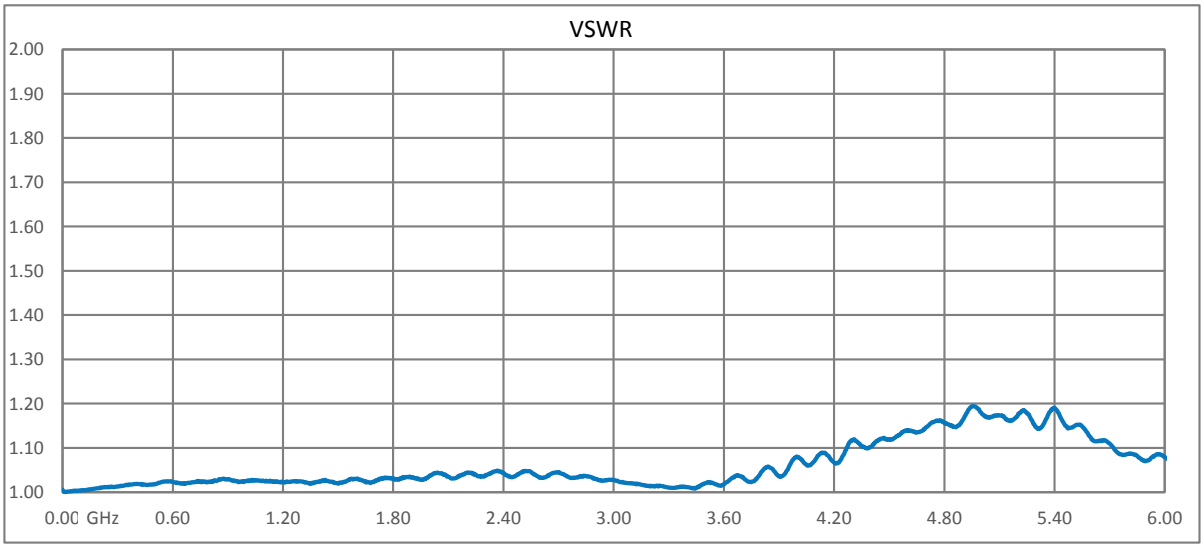
Typical Performance Data



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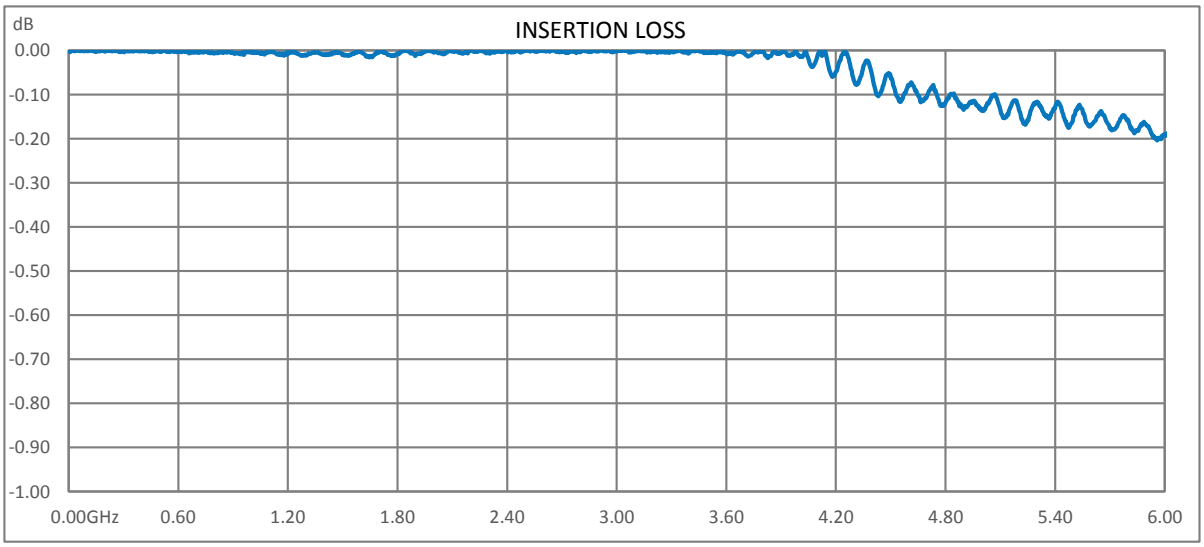

PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, DC Pass and Ultra Low PIM. Backed by responsive service 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.

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The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. PolyPhaser reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. PolyPhaser does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and PolyPhaser does not assume any liability arising out of the use of any part or documentation.

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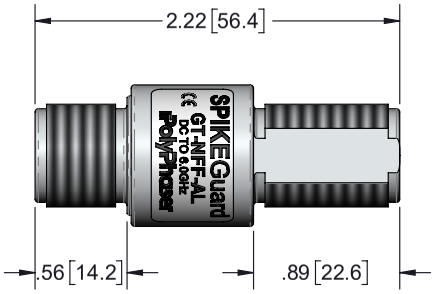
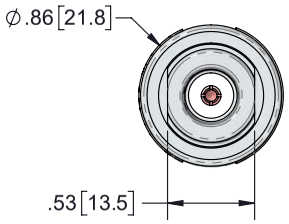
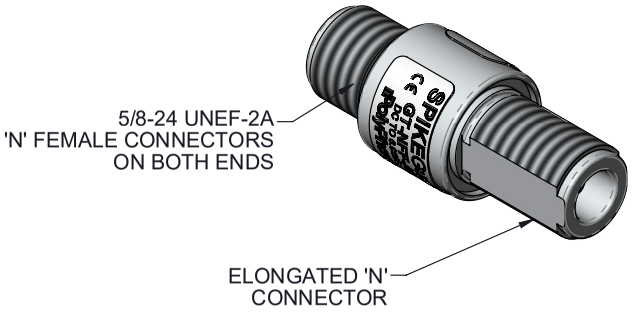
GT-NFF-AL CAD Drawing







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 INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:
FRACTIONS=± 1/32 .XX=± .01
ANGLES=± 1 ° .XXX=± .005

NOTES

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THIRD-ANGLE PROJECTION

PolyPhaser

SHEET 1 of 1

SCALE 1:1

TITLE
GAS TUBE NON-REPLACEABLE
dc-6GHz 50-100W N FEM

SIZE	CAGE	PROD CAT	DRAWING NUMBER	REV
A	30992	RFP	GT-NFF-AL	A

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