

Type N F/F Bulkhead Coaxial RF Surge Protector, DC - 6GHz,
DC Pass, 90W, IP67, 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
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 Current (DC)			90	A
Input Power, CW			90	Watts
90W @ 30MHz				
9W @ 3GHz				
Surge Current			20	kA
IEC 61000-4-5 8/20µs WAVEFORM				
Turn On Voltage		300		Volts
Throughput Energy			5	mJ
Sparkover Impulse Voltage		500		Volts

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, DC Pass, 90W, IP67, 5mJ, 20kA, Gas Discharge Tube GT-NFF-AL](#)

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500 Volts @ 1000V/ μ s

Sparkover Voltage (DC)	300 \pm 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]

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:

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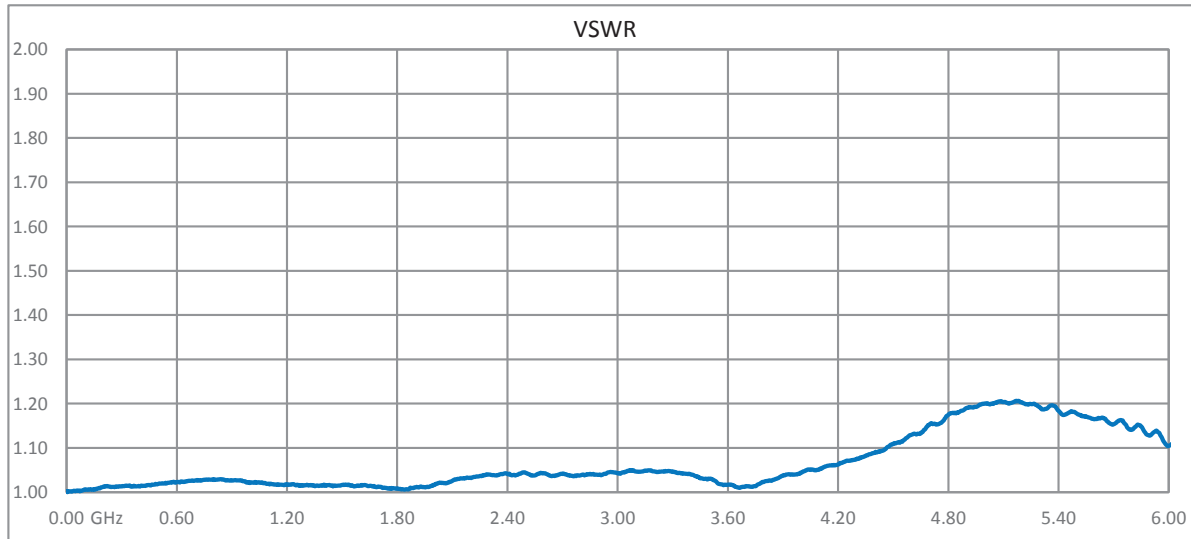


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Typical Performance Data



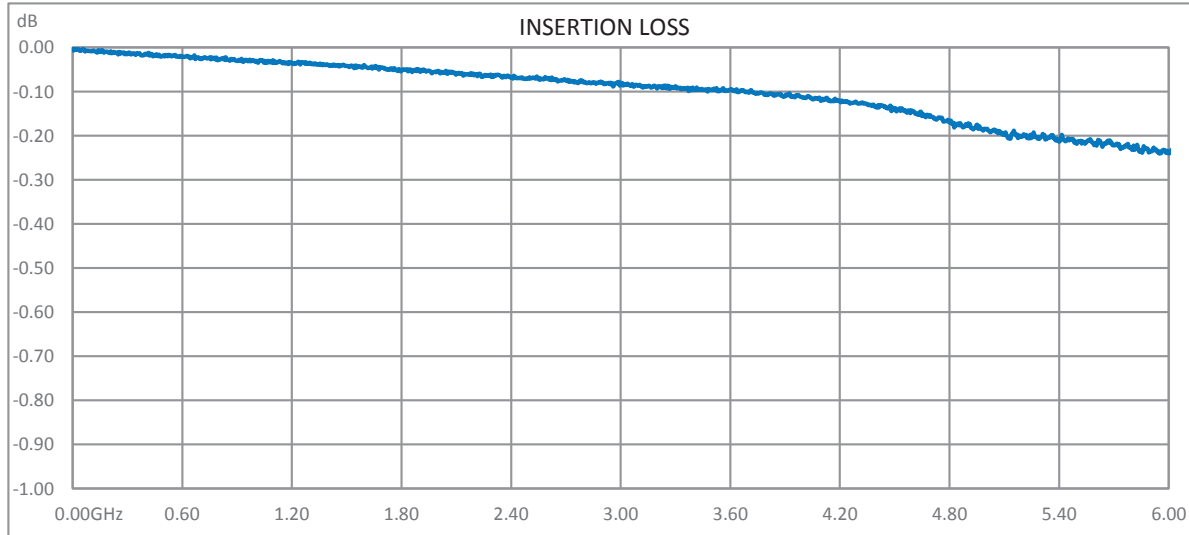
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PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, 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.

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, DC Pass, 90W, IP67, 5mJ, 20kA, Gas Discharge Tube GT-NFF-AL](https://www.polyphaser.com/type-n-surge-protector-6ghz-4ghz-gas-discharge-tube-gt-nff-al)

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GT-NFF-AL CAD Drawing

$\phi .86$ [21.8]
 $.53$ [13.5]

2.22 [56.4]
 $.56$ [14.2]
 $.89$ [22.6]

SPIKEGuard
 GT-NFF-AL
 DC TO 6.0GHz
 PolyPhaser

5/8-24 UNEF-2A
 'N' FEMALE CONNECTORS
 ON BOTH ENDS

ELONGATED 'N'
 CONNECTOR

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

UNLESS OTHERWISE SPECIFIED
 LEADING DIMENSIONS ARE IN INCHES
 DIMENSIONS IN [] ARE MILLIMETERS
 TOLERANCES:
 FRACTIONS: ± 1/32 .XX± .01
 ANGLES: ± 1° .XXX± .005
 THIRD-ANGLE PROJECTION

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

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

SHEET 1 of 1
 SCALE 1:1

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

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