

Type N F/M Bulkhead Coaxial RF Surge Protector, DC - 6GHz,
1000W, IP67, 6 V Max., 2.5mJ, 20kA, Gas Discharge Tube



GTH-NFM-AL

Features

- Surge current of 20kA
- Max Power 1000W(RMS)
- Frequency range from DC to 6 GHz
- N Female to N Male connectors
- Waterproof IP67 rated
- DC Pass
- VSWR <1.4
- CE & RoHS compliant
- Bidirectional

Applications

- WiFi
- GPS
- Land mobile radio

Description

RF surge protector (also known as lightning arrester) GTH-NFM-AL from PolyPhaser utilizing a proprietary gas tube surge protection technology protects critical hardware from lightening events while maintaining the RF performance. 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			0.25	dB
Operating Voltage (DC)			6	Volts
Operating Current (DC)			90	A
Input Power, CW			1	kWatts
Surge Current IEC 61000-4-5 8/20µs waveform			20	kA
Throughput Energy			2.5	mJ
Sparkover Impulse Voltage @ 1000V/µs		650		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/M Bulkhead Coaxial RF Surge Protector, DC - 6GHz, 1000W, IP67, 6 V Max., 2.5mJ, 20kA, Gas Discharge Tube GTH-NFM-AL](#)

Type N F/M Bulkhead Coaxial RF Surge Protector, DC - 6GHz, 1000W, IP67, 6 V Max., 2.5mJ, 20kA, Gas Discharge Tube



GTH-NFM-AL

Sparkover Voltage (DC)	600 ±20%	Volts
Holdover Voltage @ <150ms	135	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

Width/Diameter	0.86 in [21.84 mm]
Height	2.3 in [58.42 mm]

Configuration

Input Connector	N Female
Output Connector	N Male

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:

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/M Bulkhead Coaxial RF Surge Protector, DC - 6GHz, 1000W, IP67, 6 V Max., 2.5mJ, 20kA, Gas Discharge Tube GTH-NFM-AL](#)

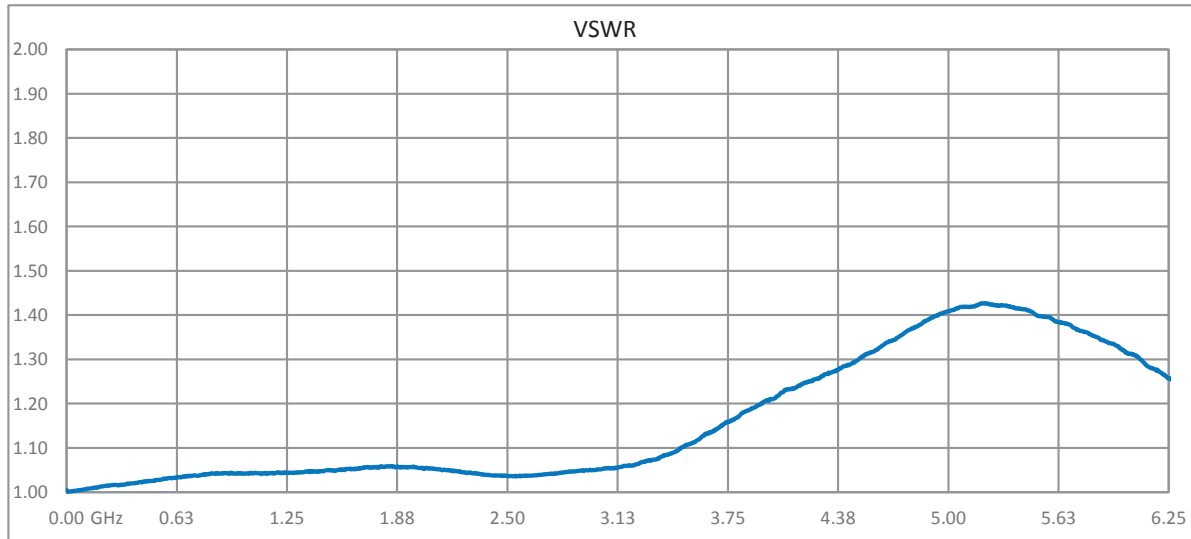


Type N F/M Bulkhead Coaxial RF Surge Protector, DC - 6GHz,
1000W, IP67, 6 V Max., 2.5mJ, 20kA, Gas Discharge Tube



GTH-NFM-AL

Typical Performance Data



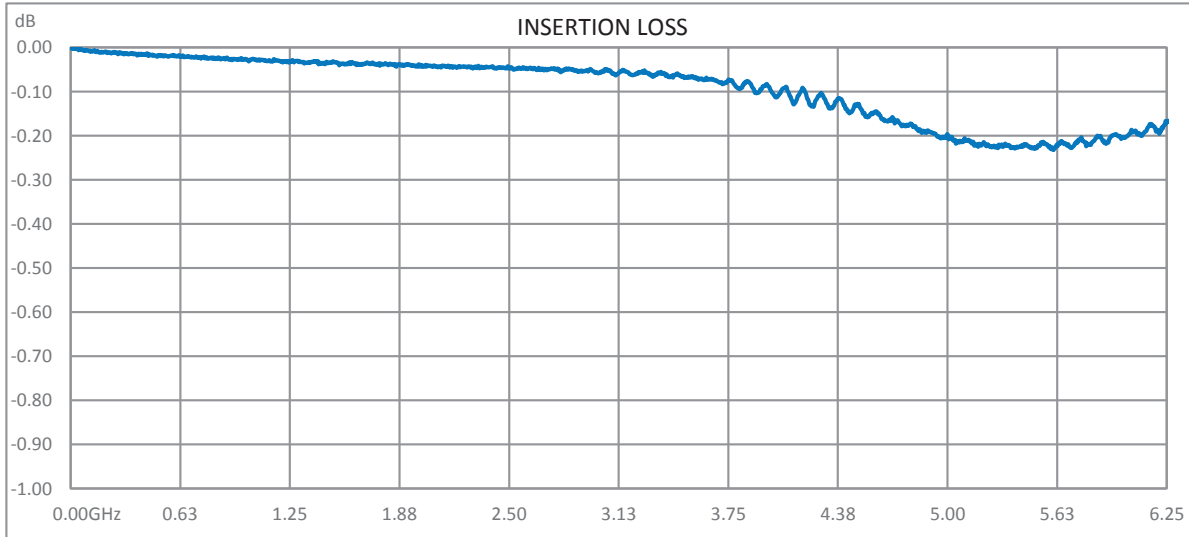
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[Type N F/M Bulkhead Coaxial RF Surge Protector, DC - 6GHz, 1000W, IP67, 6 V Max., 2.5mJ, 20kA, Gas Discharge Tube GTH-NFM-AL](#)



Type N F/M Bulkhead Coaxial RF Surge Protector, DC - 6GHz,
1000W, IP67, 6 V Max., 2.5mJ, 20kA, Gas Discharge Tube



GTH-NFM-AL



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/M Bulkhead Coaxial RF Surge Protector, DC - 6GHz, 1000W, IP67, 6 V Max., 2.5mJ, 20kA, Gas Discharge Tube GTH-NFM-AL](https://www.polyphaser.com/type-n-surge-protector-6ghz-4ghz-gas-discharge-tube-gth-nfm-al)

URL: <https://www.polyphaser.com/type-n-surge-protector-6ghz-4ghz-gas-discharge-tube-gth-nfm-al>

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.

Type N F/M Bulkhead Coaxial RF Surge Protector, DC - 6GHz, 1000W,
IP67, 6 V Max., 2.5mJ, 20kA, Gas Discharge Tube

GTH-NFM-AL CAD Drawing

MALE 'N' CONNECTOR

FEMALE 'N' CONNECTOR

2.30 [58.3]

.89 [22.6]

.81 [20.6]

ϕ .86 [21.8]

.53 [13.5]

SPIKEGuard
GTH-NFM-AL
dc to 7.0GHz
PolyPhaser

SPIKEGuard
GTH-NFM-AL
dc to 7.0GHz
PolyPhaser

HARDWARE KIT INCLUDES:

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
2	O-RING 016 SILICONE
2	NUT 5/8-24 303 HEX SS

UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS

TOLERANCES: FRACTIONS: ±.132 XX±.03 ANGLES: ±1° XXX±.010

NOTICE: THIS DRAWING IS A DESIGN IN THE PROPERTY OF POLYPHASER CORP. ALL RIGHTS RESERVED.

THIRD-ANGLE PROJECTION

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

PolyPhaser

NON-REP GASTUBE
HIGH PWR 9090-2072

SIZE: A CAGE: 30992 PROD CAT: RFP DRAWING NUMBER: GTH-NFM-AL REV: A

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.