

Type N F/M Bulkhead Coaxial RF Surge Protector, DC - 6GHz,  
1000W, IP67, 60 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
- Typical VSWR <1.1
- 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                          |         | 1.1:1    | 1.4:1   |        |
| Insertion Loss                |         | 0.1      | 0.25    | dB     |
| Operating Voltage (DC)        |         |          | 60      | Volts  |
| Operating Current (DC)        |         |          | 10      | A      |
| Input Power, CW               |         |          |         |        |
| @ 10MHz                       |         |          | 1       | kWatts |
| @ 1GHz                        |         |          | 300     | Watts  |
| Surge Current                 |         |          | 20      | kA     |
| IEC 61000-4-5 8/20µs waveform |         |          |         |        |
| Throughput Energy             |         |          | 2.5     | mJ     |
| Sparkover Voltage (DC)        |         | 600 ±20% |         | 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, 60 V Max., 2.5mJ, 20kA, Gas Discharge Tube GTH-NFM-AL](#)

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### 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     | 0.1    | 0.25   |    |    | dB    |

### Mechanical Specifications

|                |                    |
|----------------|--------------------|
| Width/Diameter | 0.86 in [21.84 mm] |
| Height         | 2.3 in [58.42 mm]  |
| Weight         | 1 lbs [453.59 g]   |

#### 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

|                |     |
|----------------|-----|
| RoHS Compliant |     |
| CE Compliant   | Yes |

### Plotted and Other Data

Notes:

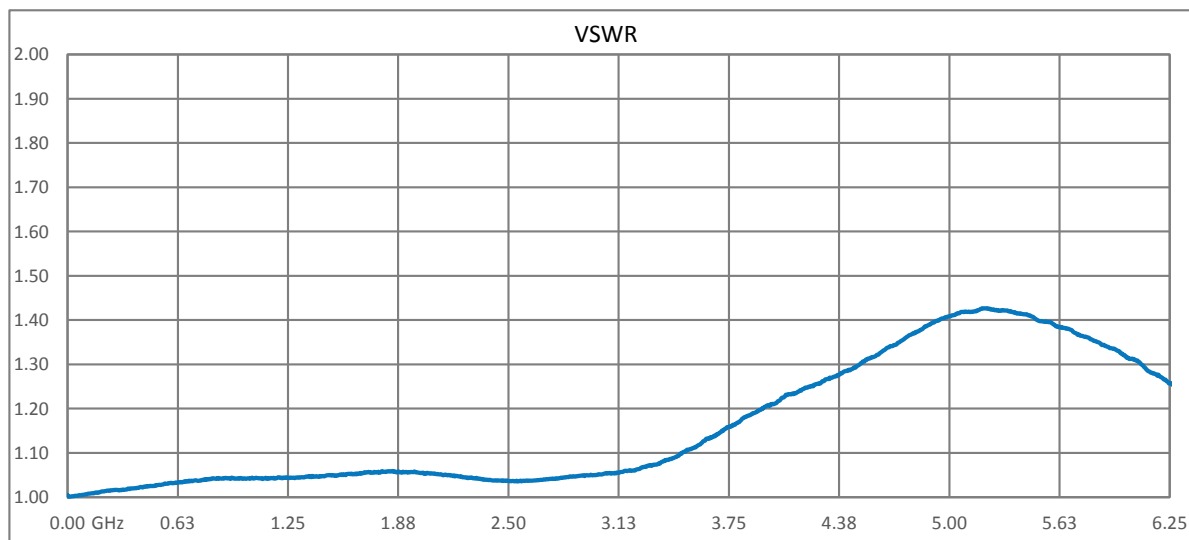
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## GTH-NFM-AL

### Typical Performance Data

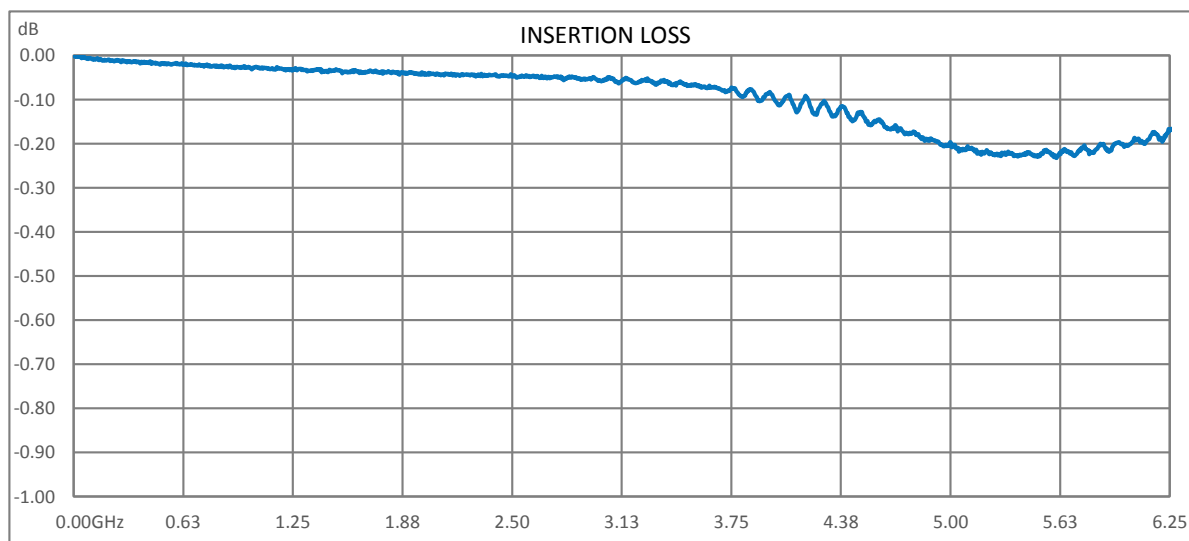


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PolyPhaser protects and increases the reliability of global RF communications networks, including transportation, telecommunications, defense, security and industrial applications, with superior RF surge protection technologies including DC Block, 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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GTH-NFM-AL CAD Drawing

