

TNC F/M Bulkhead Coaxial RF Surge Protector, DC - 7GHz,  
DC Pass, 90W, IP67, 4mJ, 20kA, Gas Discharge Tube



## GT-TFM-AL

### Features

- Surge current of 20kA
- Max Power 90W(RMS)
- Frequency range from DC to 7 GHz
- TNC Female to TNC Male connectors
- Waterproof IP67 rated
- DC Pass
- VSWR <1.4
- CE & RoHS compliant
- Directional

### Applications

- WiFi
- GPS
- Land mobile radio

### Description

RF surge protector (also known as lightning arrester or surge arrestor) GT-TFM-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		7	GHz
Impedance		50		Ohms
VSWR		1.1:1	1.4:1	
Insertion Loss		0.25	0.5	dB
Operating Current (DC)			90	A
Input Power, CW			90	Watts
Surge Current IEC 61000-4-5 8/20µs waveform			20	kA
Throughput Energy			4	mJ
Sparkover Impulse Voltage @1000V/µs		500		Volts
Sparkover Voltage (DC)		300 ±20%		Volts
Holdover Voltage		80		Volts

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[TNC F/M Bulkhead Coaxial RF Surge Protector, DC - 7GHz, DC Pass, 90W, IP67, 4mJ, 20kA, Gas Discharge Tube GT-TFM-AL](#)

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@<150ms

### Specifications by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency Range	DC to 2	2 to 3	3 to 7			GHz
VSWR, Typ	1.1:1	1.25:1	1.4:1			

### Mechanical Specifications

#### Size

Length 2.21 in [56.13 mm]  
Width/Diameter 0.86 in [21.84 mm]

#### Configuration

Input Connector TNC Female  
Output Connector TNC 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:

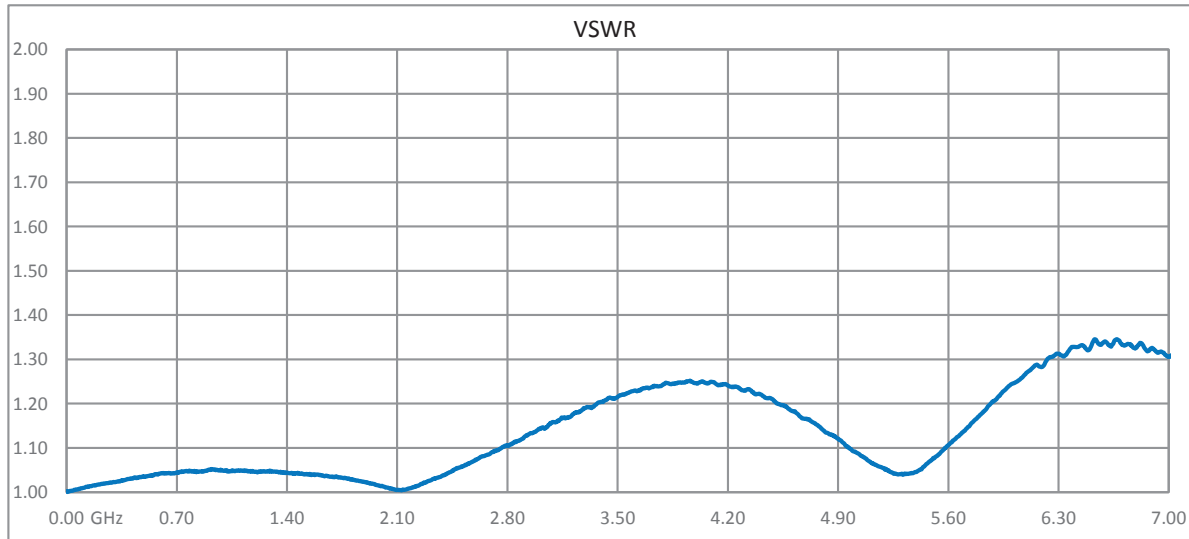
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## GT-TFM-AL

### Typical Performance Data

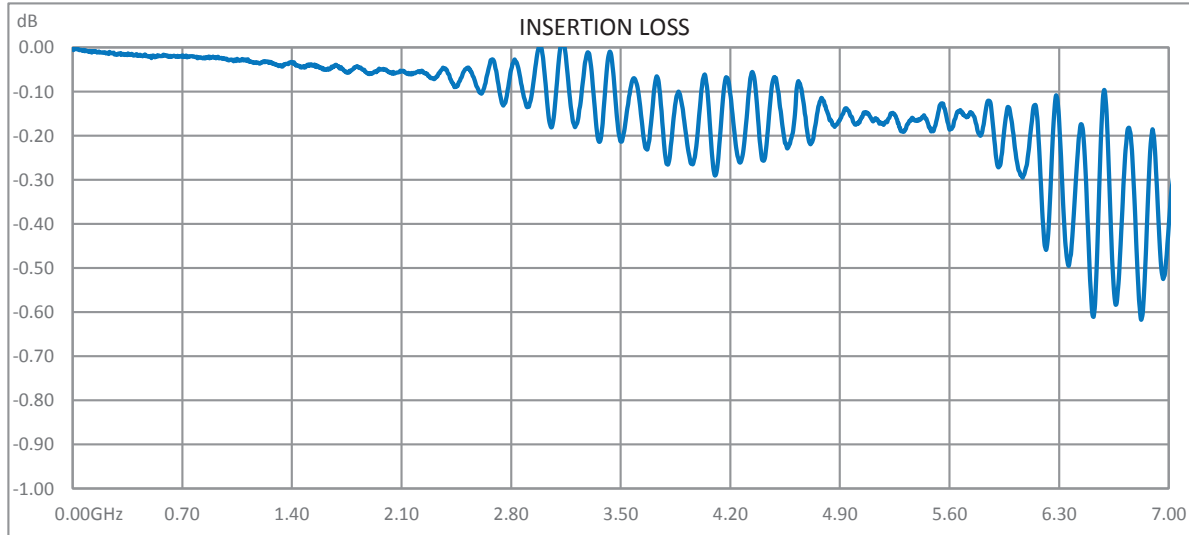


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## GT-TFM-AL



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: [TNC F/M Bulkhead Coaxial RF Surge Protector, DC - 7GHz, DC Pass, 90W, IP67, 4mJ, 20kA, Gas Discharge Tube GT-TFM-AL](https://www.polyphaser.com/tnc-surge-protector-7ghz-3ghz-gas-discharge-tube-gt-tfm-al)

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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-TFM-AL CAD Drawing

UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS  
 TOLERANCES: FRACTIONS: ± 1/32 .XX± .03 ANGLES: 1° .XXX± .010  
 NOTICE: THE INFORMATION AND DESIGN IN THIS DRAWING IS THE PROPERTY OF POLYPHASER CORP. ALL RIGHTS RESERVED.  
 THIRD-ANGLE PROJECTION

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

QTY	DESCRIPTION
1	BRACKET MOUNTING AL 5052-H32 CHINA
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

HARDWARE KIT INCLUDES:

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.

SIZE	A	CAGE	30992	PROD CAT	DCP	DRAWING NUMBER	GT-TFM-AL	REV	A
TITLE							GAS TUBE NON-REPLACEABLE		
SHEET		1		of		1		SCALE	
						1:1			