

RF Surge Protector SPD, Reverse Polarity TNC F/M, DC  
- 6GHz, 60 V Max., 10kA, Gas Discharge Tube



## GTH-RPTFM-AL

### Features

- Broadband Performance from DC to 6 GHz
- Repetitive Lightning Strike Capability
- Bi-directional Protection
- Replaceable Gas Tube for Installation Longevity
- Robust Brass Construction

### Applications

- WiFi
- Wireless Base Stations
- Automotive
- Avionics
- Military Communications

### Description

RF surge protector (also known as lightning arrestor) GTH-RPTFM-AL from PolyPhaser utilizing a gas discharge tube design to protect critical hardware while maintaining the RF performance. This RF surge protector component is manufactured in a coaxial in-line design with wide operating frequency range. PolyPhaser RF surge protector products are available in stock with same day shipping.

### Electrical Specifications

Description	Surge Protector Type DC Handling		Gas Discharge Tube DC Pass		Units
	Minimum	Typical	Maximum		
Frequency Range	DC		6		GHz
Impedance		50			Ohms
VSWR		1.2:1	1.43:1		
Insertion Loss		0.4	0.9		dB
Operating Voltage (DC)			60		Volts
Input Power, CW					
Surge Current IEC 61000-4-5 8/20µs			5		kA
Turn On Voltage		180			Volts

### Mechanical Specifications

Size	
Length	2.3 in [58.42 mm]
Width/Diameter	0.9 in [22.86 mm]
Height	1.2 in [30.48 mm]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:  
[RF Surge Protector SPD, Reverse Polarity TNC F/M, DC - 6GHz, 60 V Max., 10kA, Gas Discharge Tube GTH-RPTFM-AL](#)

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## GTH-RPTFM-AL

Weight	0.25 lbs [113.4 g]
Housing Material and Plating	Brass, Nickel
<b>Configuration</b>	
Input Connector	TNC Female Reverse Polarity
Output Connector	TNC Male Reverse Polarity

### Environmental Specifications

<b>Temperature</b>	
Operating Range	-40 to +85 deg C

### Compliance Certifications

RoHS Compliant	Yes
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### Plotted and Other Data

Notes:

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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URL: <https://www.polyphaser.com/GTH-RPTFM-AL-p.aspx>

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.

GTH-RPTFM-AL CAD Drawing

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	PRODUCTION RELEASE	1/8/21	DWR

  
  

<p>UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES DIMENSIONS IN [ ] ARE MILLIMETERS</p> <p>TOLERANCES:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">.X = ±.2 [5.08]</td> <td style="width: 33%;">FRACTIONS ± 1/32</td> <td style="width: 33%;">ANGLES ± 1°</td> </tr> <tr> <td>.XX = ±.02 [ .51]</td> <td></td> <td></td> </tr> <tr> <td>.XXX = ±.005 [ .13]</td> <td></td> <td></td> </tr> </table> <p>CABLE LENGTH (L) TOLERANCES:</p> <table style="width: 100%; border: none;"> <tr> <td>L ≤ 12 [305]</td> <td>±.1 [25]</td> <td>/-0</td> </tr> <tr> <td>12 [305] &lt; L ≤ 60 [1524]</td> <td>±.2 [51]</td> <td>/-0</td> </tr> <tr> <td>60 [1524] &lt; L ≤ 120 [3048]</td> <td>±.4 [102]</td> <td>/-0</td> </tr> <tr> <td>120 [3048] &lt; L ≤ 300 [7620]</td> <td>±.6 [152]</td> <td>/-0</td> </tr> <tr> <td>300 [7620] &lt; L ≤ ∞</td> <td>±.5% [L]</td> <td>/-0</td> </tr> </table> <p>ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.</p>	.X = ±.2 [5.08]	FRACTIONS ± 1/32	ANGLES ± 1°	.XX = ±.02 [ .51]			.XXX = ±.005 [ .13]			L ≤ 12 [305]	±.1 [25]	/-0	12 [305] < L ≤ 60 [1524]	±.2 [51]	/-0	60 [1524] < L ≤ 120 [3048]	±.4 [102]	/-0	120 [3048] < L ≤ 300 [7620]	±.6 [152]	/-0	300 [7620] < L ≤ ∞	±.5% [L]	/-0	<p><b>PolyPhaser</b> an INFINITe brand</p> <p>10701 Airport Road, Hayden, Idaho 83835, USA Phone: 1.208.635.6400   1.800.882.9110 Fax: 1.208.762.6133 Website: www.PolyPhaser.com E-mail: CustomerService@PolyPhaser.com</p> <p>THIRD-ANGLE PROJECTION</p> <p>THE INFORMATION AND DESIGN ARE THE PROPERTY OF POLYPHASER, INC. ALL RIGHTS RESERVED.</p> <p>SHEET 1 OF 1</p> <p>SCALE 1:1</p>
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SIZE	CAGE CODE	DRAWN BY	DPM	PART NUMBER	REV
A	30992			GTH-RPTFM-AL	A

  

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