RF Surge Protector SPD, Reverse Polarity SMA F/M, DC - 6GHz, 150W, 60 V Max., 10kA, Gas Discharge Tube

GTH-RPSFM-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

- Cellular
- Land Mobile Radio, VHF/UHF
- Wireless LAN
- Wireless Cable (MMDS)
- GPS

Description

RF surge protector (also known as lightning arrestor) GTH-RPSFM-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

Surge Protector Type   Gas Discharge Tube

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
Impedance		50		Ohms
VSWR			1.5:1	
Insertion Loss			0.6	dB
Operating Voltage (DC)			60	Volts
Input Power, CW			150	Watts
Surge Current			10	kA
Turn On Voltage		90		Volts

Mechanical Specifications

Size

Length	2.1 in [53.34 mm]
Width/Diameter	0.9 in [22.86 mm]
Height	1.2 in [30.48 mm]
Weight	0.25 lbs [113.4 g]
Housing Material and Plating	Brass, Tri-Metal

Configuration

Input Connector	SMA Female Reverse Polarity
Output Connector	SMA Male Reverse Polarity

Environmental Specifications

Temperature

Operating Range	-40 to +85 deg C

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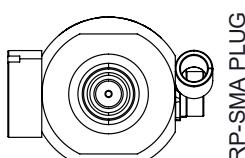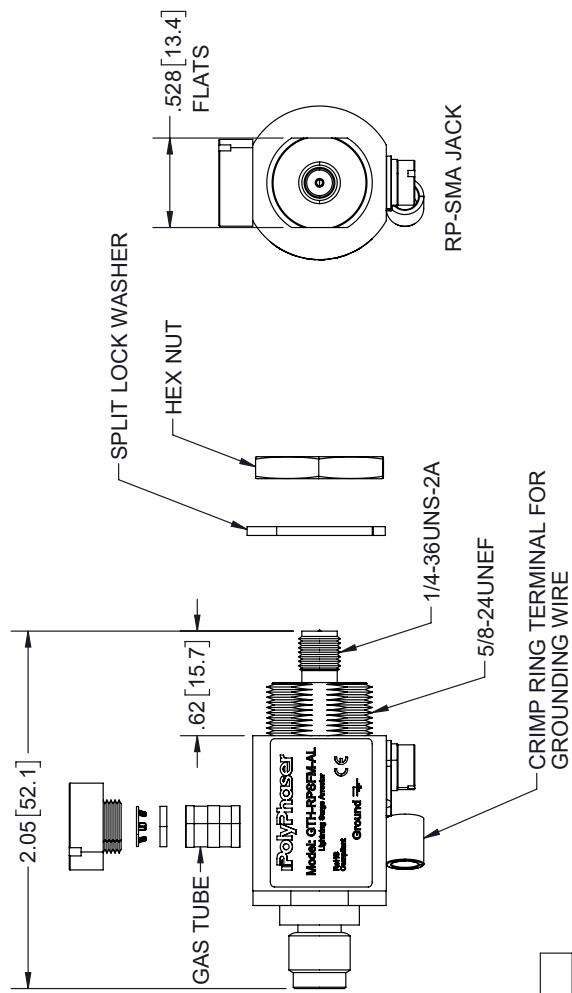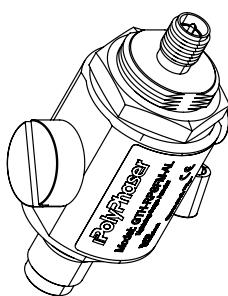**Compliance Certifications** (see product page for current document)

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.

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 SMA F/M, DC - 6GHz, 150W, 60 V Max., 10kA, Gas Discharge Tube GTH-RPSFM-AL

URL: https://www.polyphaser.com/sma-surge-protector-6ghz-gas-discharge-tube-gth-rpsfm-al-p.aspx

The information contained within 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 impliment 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 liability arising out of the use of any part or document.

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GTH-RPSFM-AL CAD Drawing

RF Surge Protector SPD, Reverse Polarity SMA F/M, DC - 6GHz, 150W, 60 V Max., 10kA, Gas Discharge Tube

REVISIONS

REV.	DESCRIPTION	ECN	DATE	APPROVED
A	PRODUCTION RELEASE		1/9/20	DWR
B	UPDATE LENGTH DIM	15401	4/6/20	DWR

.528 [13.4] FLATS

RP-SMA JACK

SPLIT LOCK WASHER

HEX NUT

1/4-36UNS-2A

5/8-24UNEF

CRIMP RING TERMINAL FOR GROUNDING WIRE

2.05 [52.1]

.62 [15.7]

GAS TUBE

RP-SMA PLUG

ELECTRICAL SPECIFICATIONS

FREQUENCY RANGE	0-6 GHz
VSWR	1 : 1.2MAX (0-6 GHz)
INSERTION LOSS	0.6 dB MAX (0-6 GHz)
IMPEDANCE	50 OHM
GAS TUBE BREAKDOWN VOLTAGE	180 V $\pm$20%

MECHANICAL SPECIFICATIONS

CONNECTORS	RP-SMA PLUG TO RP-SMA JACK BULKHEAD
CONNECTOR BODY MATERIAL	NICKEL PLATED BRASS
BODY MATERIAL	NICKEL PLATED BRASS
PIN MATERIAL	GOLD PLATED BRASS
O-RING	RUBBER
DIMENSIONS (MAX)	2.1 X 0.9 X 1.2 IN (53 X 23 X 31mm)
WEIGHT	0.25 LBS (0.11 kg)

THIRD-ANGLE PROJECTION

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SHEET 1 OF 1

SCALE 1:1

REV B

PART NUMBER GTH-RPSFM-AL

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SIZE A | CAGE CODE 30992 | DRAWN BY DPM

UNLESS OTHERWISE SPECIFIED
LEADING DIMENSIONS ARE INCHES
DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:
X = ± .2 [5.08]
.XX = ± .02 [.51]
.XXX = ± .005 [.13]

FRACTIONS ± 1/32
ANGLES ± 1°

CABLE LENGTH (L) TOLERANCES:
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

ALL DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.

T-Rev.D

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