

4.3-10 M/F Coaxial RF Surge Protector, 100MHz - 520MHz,
DC Block, 750W, 20kA, Low-PIM, Bracket Down



VHF50B43-MA-PGR-BD

Features

- 20kA surge rating
- Low let-through high pass filter design
- Bi-directional, repetitive strike protection
- 4.3-10 connectors both sides
- Broadband performance from 100 MHz to 520 MHz
- High CW and PIP RF power
- Excellent RF performance
- Low PIM
- Waterproof IP67 rated
- CE & RoHS compliant

Applications

- VHF/UHF Range 1 and Range 2
- Land Mobile Radio
- Emergency response systems
- Public safety systems

Description

RF surge protector (also known as lightning arrestor) VHF50B43-MA-PGR-BD from PolyPhaser, protects critical hardware by maintaining extremely low let-through energy during transient surges, while maintaining the RF performance. This RF surge protector provides bi-directional repetitive strike protection over a wide operating frequency range. PolyPhaser RF surge protector products are available in stock with same day shipping.

Electrical Specifications

Surge Protector Type
DC Handling

High Pass
DC Block

Description	Minimum	Typical	Maximum	Units
Frequency Range	100		520	MHz
Impedance		50		Ohms
Return Loss			26	dB
Insertion Loss			0.1	dB
Passive Intermodulation			-155	dBc
Input Power, CW			750	Watts
Input Power, Peak			25	kWatts
Surge Current IEC 61000-4-5 8/20µs WAVEFORM			20	kA
Throughput Energy for 3kA @ 8/20µs waveform			500	nJ

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[4.3-10 M/F Coaxial RF Surge Protector, 100MHz - 520MHz, DC Block, 750W, 20kA, Low-PIM, Bracket Down VHF50B43-MA-PGR-BD](#)

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Mechanical Specifications

Size

Length	4.21 in [106.93 mm]
Width/Diameter	3.01 in [76.45 mm]
Height	1.66 in [42.16 mm]
Weight	1.15 lbs [521.63 g]

Configuration

Input Connector	4.3-10 Male
Output Connector	4.3-10 Female

Environmental Specifications

Temperature

Operating Range	-50 to +85 deg C
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Ingress Protection (IP) Rating

IP67

Humidity

99% (non-condensing)

Compliance Certifications

RoHS Compliant	Yes
CE Compliant	Yes
UL	UL497E
Standard	Motorola R56

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/4.3-10-surge-protector-520mhz-high-pass-vhf50b43-ma-pgr-bd-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

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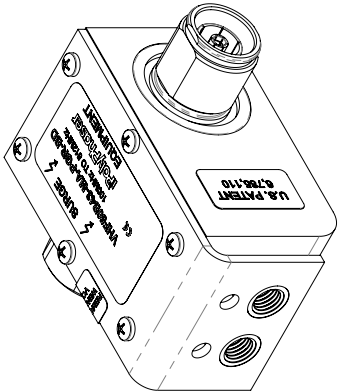
VHF50B43-MA-PGR-BD

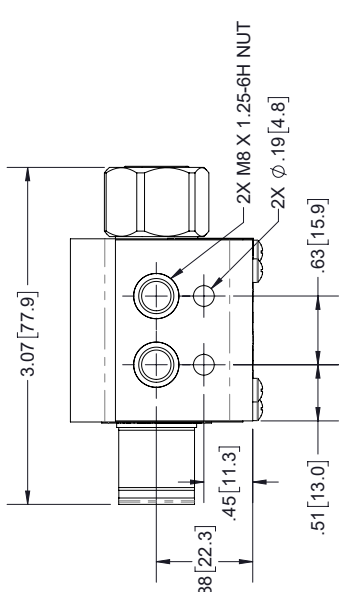


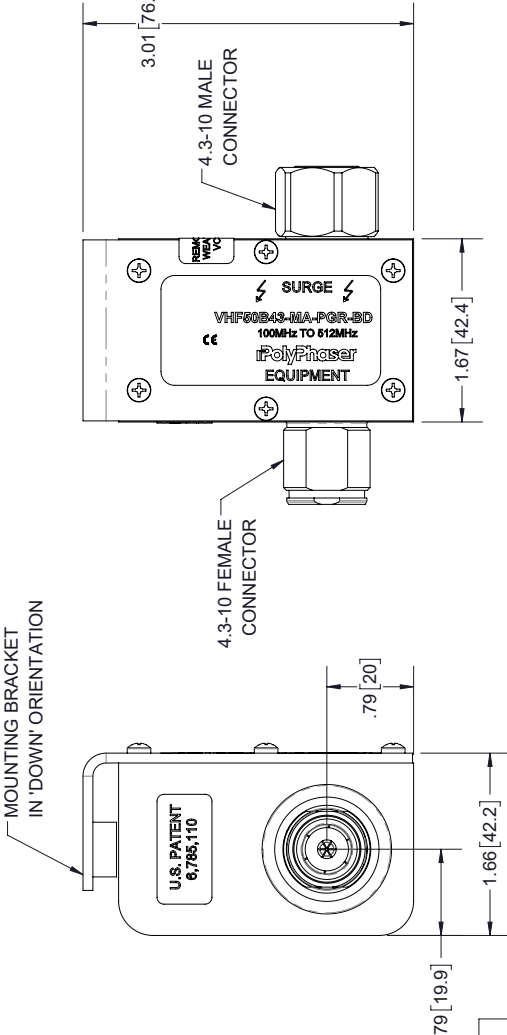
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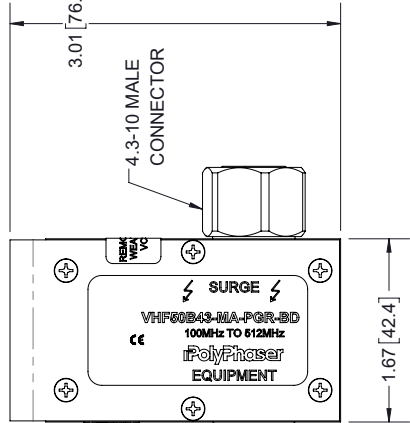
VHF50B43-MA-PGR-BD CAD Drawing

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INITIAL RELEASE	7/15/2020	DWR









MOUNTING BRACKET
IN 'DOWN' ORIENTATION

QTY	DESCRIPTION
2	WASHER 5/16 EXT 18-8 SS
2	SCREW CAP M8X1.25X10MM
1	NUT 3/4-28 HEX SS PANEL
1	O-RING 018 SILICONE
1	LOCK WASHER INT TOOTH 3/4 SS

U.S. PATENT
6,786,110

SURGE
VHF50B43-MA-PGR-BD
100MHz TO 612MHz
PolyPhaser
EQUIPMENT

4.3-10 FEMALE
CONNECTOR

4.3-10 MALE
CONNECTOR

THIRD-ANGLE PROJECTION

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DESIGN IS THE PROPERTY OF
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SHEET 1 OF 1

SCALE 2:3

REV 2:3

DRAWN BY DPM

CAGE CODE A 30992

PART NUMBER VHF50B43-MA-PGR-BD

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

TOLERANCES:

.X = ±.2 [5.08] FRACTIONS ±.1/32

.XX = ±.02 [.51] ANGLES ± 1°

.XXX = ±.005 [.13]

CABLE LENGTH (L) TOLERANCES:

L ≤ 12 [305] < L ≤ 60 [1524] = ±1 [25] / -0

60 [1524] < L ≤ 120 [3048] = ±4 [102] / -0

120 [3048] < L ≤ 300 [7620] = ±6 [152] / -0

300 [7620] < L = ±5% / -0

ALL DIMENSIONS SHOWN
ARE FOR REFERENCE ONLY.

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