

PTI-BB50 -W Weatherized Series

Type N Connector Series Coaxial RF Surge Protector, DC Block, 1.5MHz - 1000MHz, 2kW, 5mJ, 50kA, Four Mounting Position Options L-Bracket, Hole Mount

DC Block Coaxial RF Surge Protectors incorporate a blocking capacitor and gas discharge tube (GDT) to provide isolation, directional operation and maximum RF power of 2.0kW. IP67 Compliant (when mated).

PTI-BB50 Series lightning and surge protectors help protect your equipment from electromagnetic pulse (EMP) or power surges that are commonly caused by lightning or other strong electrical charges.

Features:

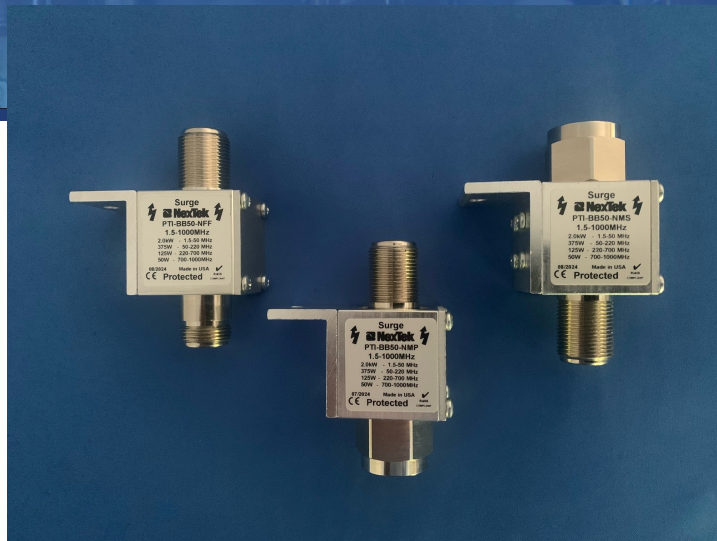
- Broad Frequency Range
- Low VSWR and Insertion Loss
- DC Blocking Capacitor
- Multi-Strike Capability
- Surge Current of 50kA
- Max RF Power 2kW
- RoHS & CE Compliant
- Multi-Positioning L-Bracket for Flange or Bulkhead Mounting

Applications:

- HF, UHF and VHF radios
- Amateur (HAM) radios
- Remote Industrial Monitoring and SCADA

Model Numbers:

- **PTI-BB50-NFF-W**
N-Female connector on Surge and Protected sides
- **PTI-BB50-NMP-W**
N Female connector on surge and N-Male on protected side
- **PTI-BB50-NMS-W**
N-Male connector on Surge and N-Female on Protected side



Electrical Specifications:

Impedance	50 Ω
Frequency	1.5 - 1000 MHz
VSWR	$\leq 1.1:1$ (Over Frequency Range)
Insertion Loss	$\leq 0.1\text{dB}$ (Over Frequency Range)
Maximum RF Power at Frequency	2.0kW (1.5 - 50 MHz) 375W (50 - 220 MHz) 125W (220 - 700 MHz) 50W (700 - 1000 MHz)

Transient Specifications:

Protection Circuit	DC Block
Surge Current	IEC 61000-4-5 8/20 μs Waveform
Maximum Surge	50 kA (1x)
Rated Impulse Discharge Current	20 kA Multiple (10x) 8x20 μs Waveform
Turn-on Voltage	600V $\pm 20\%$ @ 1kV/ μs
Turn-on Time	2.5ns for 2kV/ns
Let-Through Energy	$\leq 5\text{mJ}$ $\leq 20\%$ @ 3kA 8/20 μs Waveform

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Mechanical/Environmental Specifications:

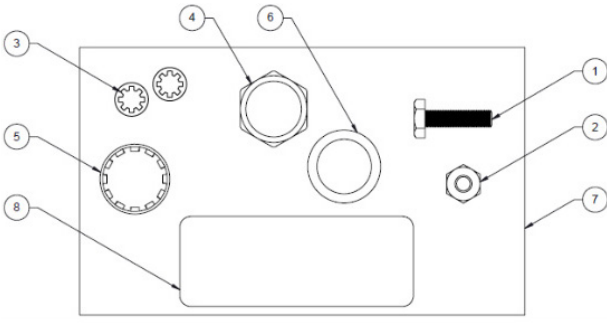
Storage/Operational Temp	-55°C to 85°C
Ingress Protection (IP Rating)	IP67 IEC60529 (When Mated)
Weight	0.31 lb. (0.14kg)
Vibration	1G up to 100Hz
RoHS compliant	Yes
CE	Yes

Material & Finish Specifications:

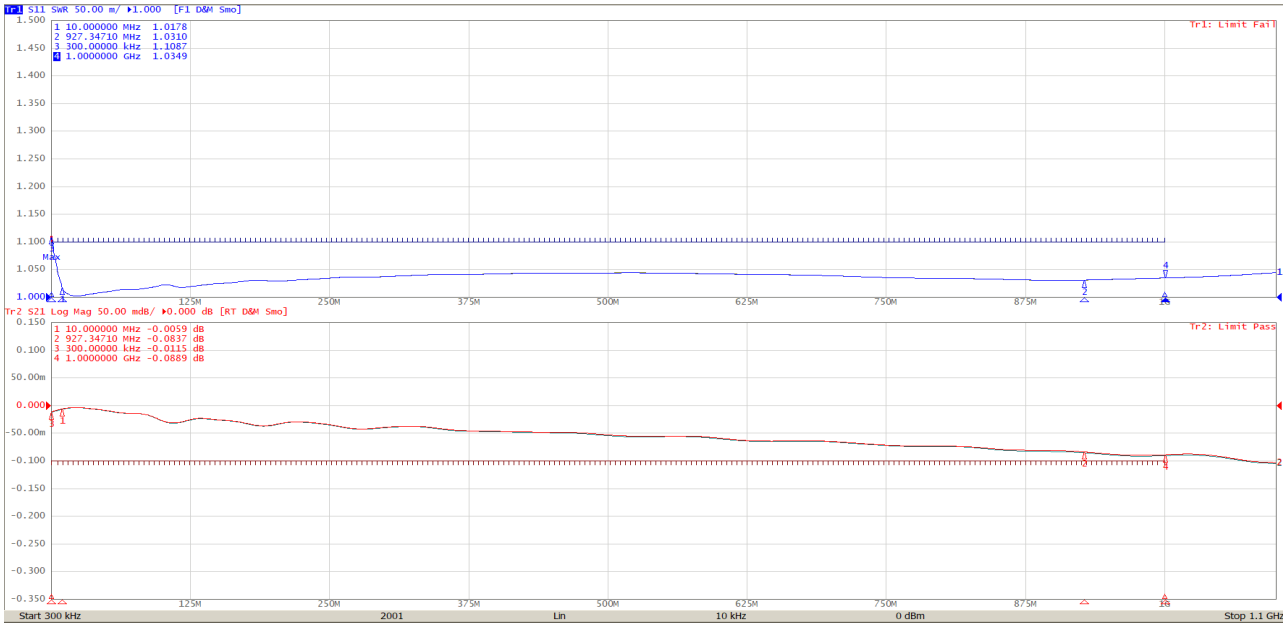
Component	Material	Finish
Outer Parts	Aluminum	Ball Burnish
Connectors	Brass	Tri-Metal
Coupling Nut & Washer	SST	---
Center Contact	Be Cu / Brass	Gold
Insulator	PTFE	---

Hardware Kit - Included:

Item	Description	Qty
1	Screw 10-32 x 0.75 HEX MS 18-8 SS	1
2	Nut 10-32 HEX 18-8 SS	1
3	Washer 10 INT4-10 SS	2
4	Nut 5/8-24 303 HEX SS	1
5	Washer 5/8 410 SS	1
6	Type N Female O-Ring 114 EPDM	1
7	Bag	1
8	Kit Number Label for Replacement	1



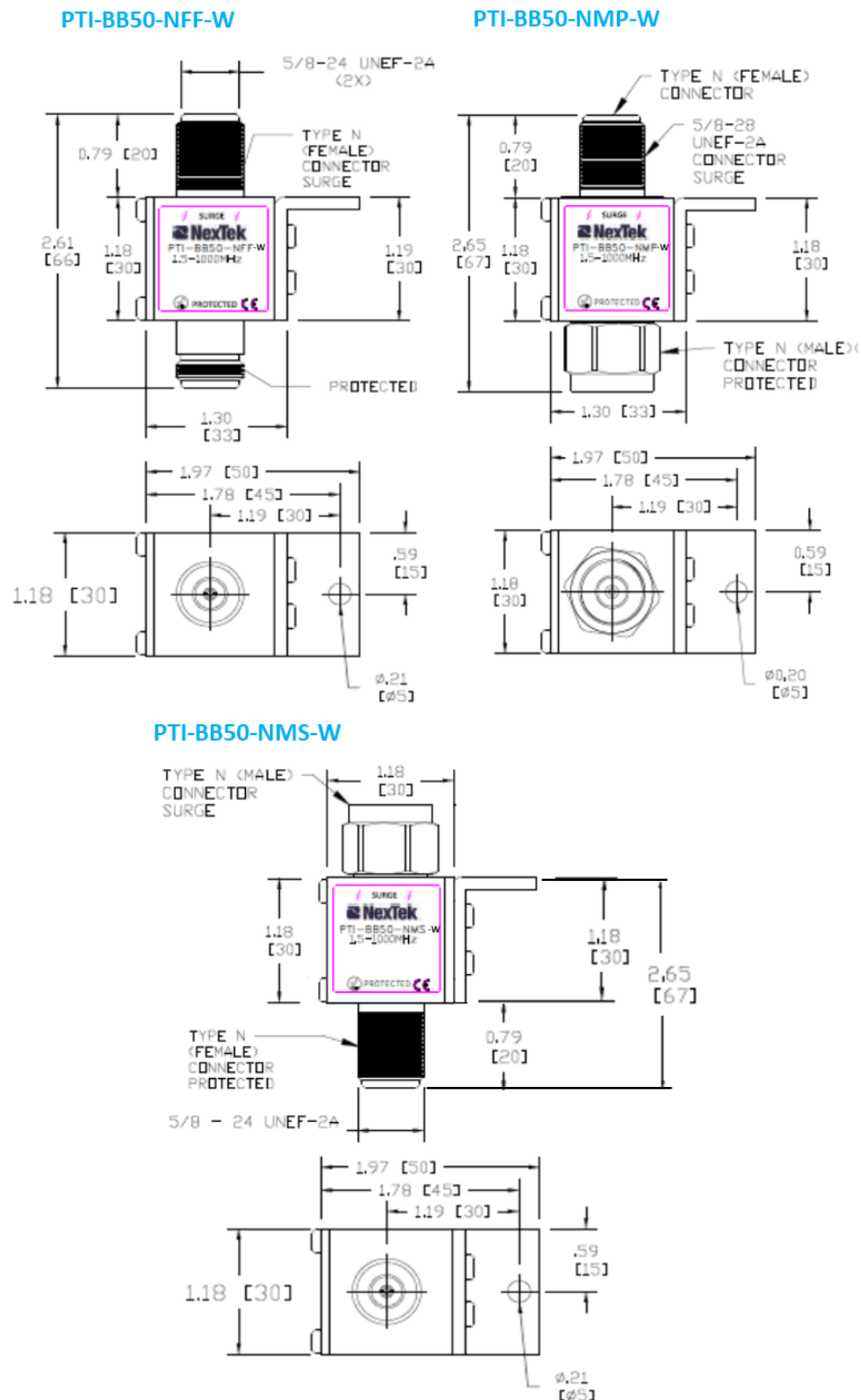
VSWR & Insertion Loss Graphs:



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Mechanical Outlines:



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Who we are and what we do:

Since 1986, NexTek is recognized as a World-Class leading supplier of innovative, high-quality coaxial RF surge protection devices (SPD's) that protect critical and sensitive electronic equipment from the harmful effects of lightning and other sources of electrical surges. NexTek is a proven supplier with an extensive coaxial product offering covering a vast range from DC to 18 GHz.

NexTek, LLC designs and manufactures a majority of these products from its Billerica, Massachusetts USA headquarters, approximately 30 minutes from Boston. All NexTek products feature field proven designs and construction. Products come with a Ten (10) year Factory Warranty.

These RF surge protection devices are designed to withstand harsh environmental conditions. With hundreds of thousands of SPD's installed and operational on all seven (7) continents and in many space applications, NexTek has built an exceptional reputation for quality and service. Please visit our website for the latest news and product releases at www.nextek.com

Other Filter and Surge Arrestor Product Solutions from NexTek:

- High Current Capacitive (C-Type) Feed-through Filters - HPR Series
- High Current High Reliability 96-Hr Burn in Tested Filters - HPR-E Series
- DC/AC Power Line Surge Suppressors - DCL Series and ACL Series
- Data Line Surge Suppressors - DLP Series
- Failsafe Hi Reliability, Redundant Capacitor Array Filters - FSF Series
- Hi-Current Pi (C-L-C) Feed-through Filters & Arrestors - HCP/HCS Series