IS-B50LN-C2

Features
- Surge current of 20kA
- Max Power 1.5kW
- Frequency range from 10 MHz to 1000 MHz
- N Female to N Female connectors
- VSWR <1:1:1
- Multi-strike capability
- CE & RoHS compliant

Applications
- HF, UHF and VHF radios
- Ham radios
- Remote industrial monitoring

Description
RF surge protector (also known as lightning arrester or surge arrester) IS-B50LN-C2 from PolyPhaser, integrating a RF blocking capacitor with 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

<table>
<thead>
<tr>
<th>Description</th>
<th>Minimum</th>
<th>Typical</th>
<th>Maximum</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Range</td>
<td>10</td>
<td>1,000</td>
<td></td>
<td>MHz</td>
</tr>
<tr>
<td>Impedance</td>
<td>50</td>
<td></td>
<td></td>
<td>Ohms</td>
</tr>
<tr>
<td>VSWR</td>
<td></td>
<td></td>
<td>1.1:1</td>
<td></td>
</tr>
<tr>
<td>Insertion Loss</td>
<td>0.1</td>
<td></td>
<td></td>
<td>dB</td>
</tr>
<tr>
<td>Input Power, CW</td>
<td></td>
<td></td>
<td>1.5</td>
<td>kWatts</td>
</tr>
<tr>
<td>1.5kW @ 10 to 50MHz</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>375W @ 50 to 220MHz</td>
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</tr>
<tr>
<td>125W @ 220 to 700MHz</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>50W @ 700 to 1000MHz</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Surge Current</td>
<td>20</td>
<td></td>
<td></td>
<td>kA</td>
</tr>
<tr>
<td>IEC 61000-4-5 8/20μs WAVEFORM MULTIPLE</td>
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</tr>
<tr>
<td>Turn On Voltage</td>
<td>600 ±20%</td>
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<td></td>
<td>Volts</td>
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<tr>
<td>Throughput Energy</td>
<td>120</td>
<td></td>
<td></td>
<td>μJ</td>
</tr>
<tr>
<td>@ 3kA 8/20μs WAVEFORM</td>
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</tbody>
</table>

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications:
Type N F/F Bulkhead Coaxial RF Surge Protector, 10MHz - 1GHz, DC Block, 1.5kW, 120μJ, 20kA, Blocking Cap, Hole Mount IS-B50LN-C2
Type N F/F Bulkhead Coaxial RF Surge Protector, 10MHz - 1GHz, DC Block, 1.5kW, 120uJ, 20kA, Blocking Cap, Hole Mount

IS-B50LN-C2

Mechanical Specifications

Size
Length  2.72 in [69.09 mm]
Width/Diameter  1 in [25.4 mm]
Height  2.25 in [57.15 mm]
Weight  0.35 lbs [158.76 g]

Configuration
Input Connector  N Female
Output Connector  N Female

Environmental Specifications

Temperature
Operating Range  -50 to +50 deg C
Storage Range  -55 to +85 deg C

Ingress Protection (IP) Rating  None
Vibration  1G up to 100Hz

Compliance Certifications
RoHS
CE

Plotted and Other Data
Notes:

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications:
Type N F/F Bulkhead Coaxial RF Surge Protector, 10MHz - 1GHz, DC Block, 1.5kW, 120uJ, 20kA, Blocking Cap, Hole Mount IS-B50LN-C2
Type N F/F Bulkhead Coaxial RF Surge Protector, 10MHz - 1GHz, DC Block, 1.5kW, 120uJ, 20kA, Blocking Cap, Hole Mount

**IS-B50LN-C2**

**Typical Performance Data**

![VSWR Graph](image)

Click the following link (or enter part number in “SEARCH” on website) to obtain additional part information including price, inventory and certifications:

Type N F/F Bulkhead Coaxial RF Surge Protector, 10MHz - 1GHz, DC Block, 1.5kW, 120uJ, 20kA, Blocking Cap, Hole Mount IS-B50LN-C2
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: Type N F/F Bulkhead Coaxial RF Surge Protector, 10MHz - 1GHz, DC Block, 1.5kW, 120uJ, 20kA, Blocking Cap, Hole Mount IS-B50LN-C2


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IS-B50LN-C2 CAD Drawing

Type N F/F Bulkhead Coaxial RF Surge Protector, 10MHz - 1GHz, DC
Block, 1.5kW, 120µj, 20kA, Blocking Cap, Hole Mount

HARDWARE KIT INCLUDES:

<table>
<thead>
<tr>
<th>QTY</th>
<th>DESCRIPTION</th>
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<tr>
<td>1</td>
<td>SCREW 10-32x.75 HEX MS 18-8 SS</td>
</tr>
<tr>
<td>1</td>
<td>NUT 10-32 HEX 18-8 SS</td>
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<tr>
<td>2</td>
<td>WASHER 10 INT 4-10 SS</td>
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<tr>
<td>1</td>
<td>NUT 5/8-24 303 HEX SS</td>
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<tr>
<td>1</td>
<td>WASHER 5/8 410 SS</td>
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<tr>
<td>1</td>
<td>O-RING 114 EPDM</td>
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</tbody>
</table>

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