Model 9SPOP2 is a port powered two-channel isolator with a 2,500 Volt protection level. It optically isolates both the RS-232 Transmit and Receive data lines and RS-232 equipment from lightning surges, accidental high voltage shorts, and ground loops. RS-232 data signals TD and RD are supported at up to 115.2 kbps.

**Surge Protection Standards**

IEC 1000-4-5: 1995 “Surge Immunity Test” and IEEE C62.41-1991 “IEEE Recommended Practice on Surge Voltages in Low-Voltage AC Power Circuits” are the recognized standards for surge protection. Advantech B+B SmartWorx’ heavy duty surge protectors have been tested at 6 kV to meet these two specifications.

**Learn more about surge suppression & isolation**
www.bb-elec.com/TechLibrary

- “Isolation: Your Best Investment for Reliability”
- “Dataline Isolation Theory”
- “Dataline Surge Protection”

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>MODEL NUMBER</th>
<th>CHANNELS PROTECTED</th>
<th>DTE CONNECTOR</th>
<th>DCE CONNECTOR</th>
<th>ISOLATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>9SPOP2</td>
<td>2</td>
<td>DB9 Female</td>
<td>DB9 Male</td>
<td>2,500 V</td>
</tr>
</tbody>
</table>

**ACCESSORIES**

- 9PAMF6 - DB9 Male To DB9 Female, 1.8 m (6 ft.)
- MMNM9 - Null Modem Adapter – DB9 Male / DB9 Male
- 232HESP - RS-232 Surge Protector

**SPECIFICATIONS**

**SERIAL TECHNOLOGY**

<table>
<thead>
<tr>
<th>Data Rate</th>
<th>9600 baud rate</th>
</tr>
</thead>
</table>

**RS-232**

- Connector: DB9 female (DTE), DB9 male (DCE)
- Signals: TD, RD
- Transmission Mode: Asynchronous, half or full duplex, point-to-point

**POWER**

- Source: Port powered from both sides. DTE side - DTR & RTS lines. DCE side - DCD, DSR & CTS lines.
- Weight: 0.08 lb (36.3 g)

**ISOLATION**

- Volts/Duration: 2,500 Volts RMS isolation for 1 minute

**MECHANICAL**

- Dimensions: 6.1 x 3.3 x 1.7 cm (2.4 x 1.3 x 0.66 in)
- MTBF: 674717
- MTBF Calc. Method: Parts Count Reliability Prediction

**ENVIRONMENTAL**

- Operating Temperature: 0 to +70 °C
- Storage Temperature: -55° to 125°C
- Operating Humidity: 0 to 95% Non-Condensing
- MTBF: 674717.4
- MTBF Calc. Method: Parts Count Reliability Prediction

**APPROVALS / CERTIFICATIONS - 9SPOP2**

- CE
- EN 61000-6-1: 2007 Generic Standards for Residential, Commercial and Light-Industrial Environments
- EN 61000-4-2: 2009 Electro-Static Discharge (ESD)
- EN 61000-4-3: 2006 +A1 +A2 +IS1 Radiated Field Immunity (RFI)
- EN 61000-4-4: 2012 Electrical Fast Transients-Burst Immunity (EFT)
- EN 61000-4-6: 2009 Conducted Immunity

Download complete Declaration of Conformity at www.bb-elec.com