



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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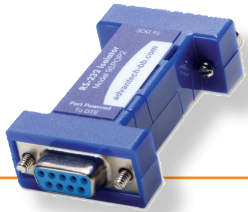
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# 2.5 kV RS-232 Optical Isolator

## 9SP0P2



### PRODUCT FEATURES

- 2,500V, 2-way optical isolation
- RS-232 on DB9 male and female connectors
- Port-powered on both sides, no external power supply required

Model 9SP0P2 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.

### ORDERING INFORMATION

| MODEL NUMBER | CHANNELS PROTECTED | DTE CONNECTOR | DCE CONNECTOR | ISOLATION |
|--------------|--------------------|---------------|---------------|-----------|
| 9SP0P2       | 2                  | DB9 Female    | DB9 Male      | 2,500 V   |

### 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   |  |
|---|--|
| Data Rate   | 9600 baud rate   |
| <b>RS-232</b>   |  |
| Connector   | DB9 female (DTE)   |
| Connector   | 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 Protection   |
| APPROVALS / CERTIFICATIONS - 9SP0P2   |  |
| FCC Part 15, CISPR, EN 55022: 2010 + AC:2011 Class A Emissions                                      |  |
| 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 <a href="http://www.bb-elec.com">www.bb-elec.com</a> |  |

### 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](http://www.bb-elec.com/TechLibrary)

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

### MECHANICAL DIAGRAM

