

DIN-Rail mount BNC connector data signal surge protective devices for coaxial cable systems

RoHS



Common applications include protecting outdoor video surveillance systems or video control centers or coaxial data lines. For BSPD5BNCDI, the cable shield is indirectly grounded via a gas discharge tube to avoid being influenced by leakage pickups.

Agency information

- UL® 497B listed
- RoHS compliant

Features:

- Plug-in surge protective device for easy retrofitting
- The space-saving surge arrester with BNC socket is mounted on supplied rail terminal lug or standard 35mm DIN-Rail
- Integrated direct or indirect shield grounding avoids leakage pickups
- Easily adaptable due to BNC sockets

Catalog numbers:

- BSPD5BNCDD
- BSPD5BNCDI

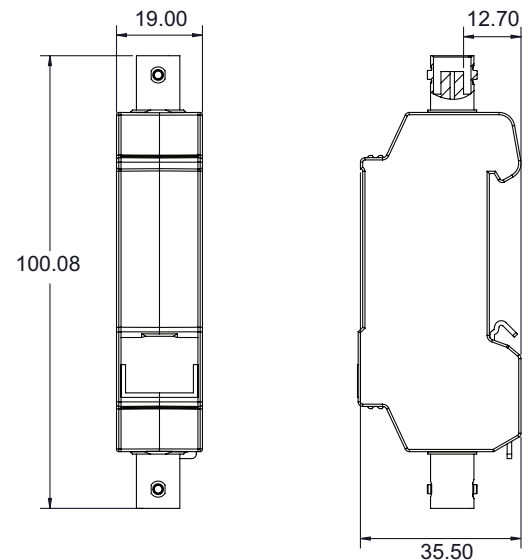
Description:

The Bussmann™ series BSPD5BNCDD and BSPD5BNCDI two-stage DIN-Rail mounted surge arresters are for protecting coaxial cable-connected systems (such as video and camera systems) from potential damage.

The BSPD5BNCDD features direct (VCD) shield connection while the BSPD5BNCDI features indirect shield connection (VCID) to prevent leakage pickups.

The BSPD5BNCDD and BSPD5BNCDI shielded surge arresters are mounted on the supplied bracket with cable lug or mounted on a rack-mounted DIN-Rail with suitable grounding. BNC connector terminated data or video signal cables are plugged into surge arrester with the equipment plugged into the protected side.

Dimensions — mm

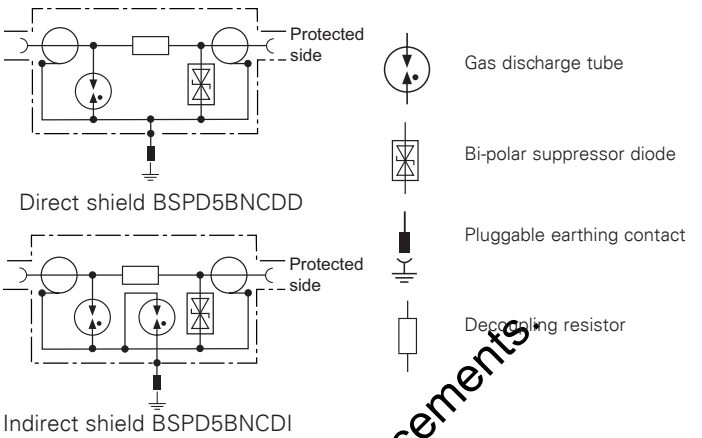


Catalog numbers and specifications

| Catalog numbers | BSPD5BNCDD | BSPD5BNCDI |
|--|---|------------|
| Return loss at 300 MHz | ≥8 dB | ≥10 dB |
| Capacitance shield-PG (C) | — | ≤20pF |
| Voltage protection level shield-PG for In C2 (U _p) | — | ≤650 V |
| Voltage protection level shield-PG at 1 kV/μs C3 (U _p) | — | ≤600 V |
| Nominal voltage (U _N) | 5 V | |
| Max. continuous operating DC voltage (U _c) | 6.4 V | |
| Nominal current (I _N) | 0.1 A | |
| C2 Nominal discharge current (8/20 μs) shield-PG (I _N) | 10 kA | |
| C2 Nominal discharge current (8/20 μs) line-shield (I _N) | 5 kA | |
| Voltage protection level line-shield for In C2 (U _p) | ≤35 V | |
| Voltage protection level line-shield at 1 kV/μs C3 (U _p) | ≤13 V | |
| Frequency range | 0-300 MHz | |
| Insertion loss at 160 MHz | ≤0.4 dB | |
| Insertion loss at 300 MHz | ≤3 dB | |
| Return loss at 130 MHz | ≥20 dB | |
| Impedance (Z) | 50 Ω | |
| Series impedance per line | 4.7 Ω | |
| Capacitance line-shield (C) | ≤25 pF | |
| Operating temperature range | -40°C to +80°C | |
| Degree of protection | IP10 | |
| For mounting on | 35mm DIN-Rails per EN 60715 | |
| Connection (input / output) | BNC Socket (female) / BNC Socket (female) | |
| Grounding | Via 35 mm DIN-Rail per EN 60715 | |
| Enclosure material | Zinc die casting | |
| Color | Bare surface | |
| Test standards | IEC 61643-21, EN 61643-21 | |
| Agency Information | UL 97B | |
| Warranty | 5 Years* | |

* See Bussmann SPD Limited Warranty Statement (1502) for details at www.cooperbussmann.com/Surge.

Circuit diagrams

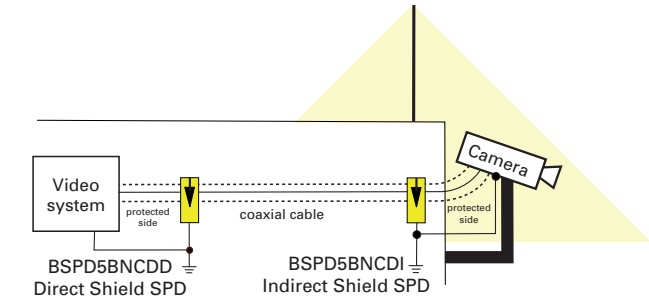


DIN-Rail BNC SPD applications

| Catalog numbers | BSPD5BNCDD | BSPD5BNCDI |
|---|------------|------------|
| Bus systems and measuring, and control technology | | |
| Control Net | X | X |
| Melsec Net 2 | X | X |
| N1 LAN | X | X |
| Data networks | | |
| Arcnet | X | X |
| Video systems | | |
| Video (coax) | X | X |

Direct vs. indirect shielding - example

Apply the BSPD5BNCDD (direct shield) at the equipment location and apply the BSPD5BNCDI (indirect shield) near exterior protected equipment. The indirect shield grounding at the exterior device will help avoid picking up leakage currents that can degrade signal quality while providing surge protection when needed. See illustration below for installation locations.



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Printed in USA
Publication No. 2158 — BU-SB13141
December 2016

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