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

RoHS

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.

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.

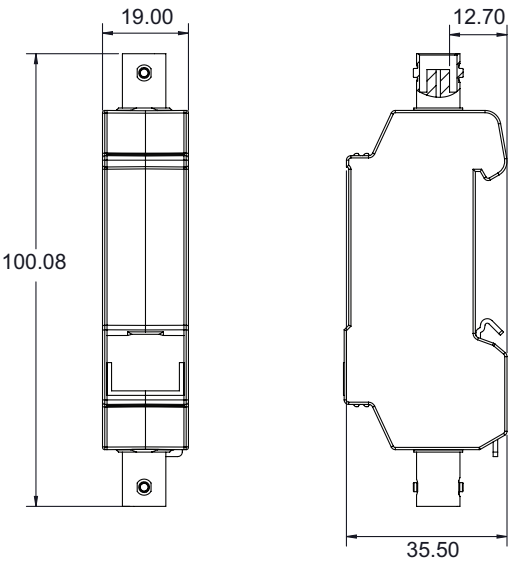
Agency information

- 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

Dimensions — mm



Powering Business Worldwide

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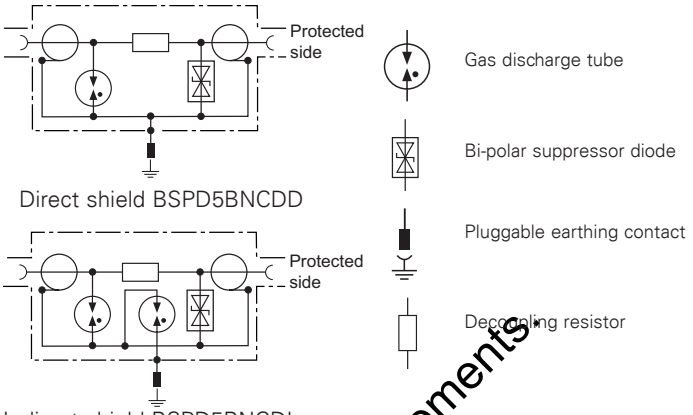
Catalog numbers and specifications

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_L)	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 497B	
Warranty	5 Years*	

* See Bussmann SPD Limited Warranty Statement (A1502) for details at www.cooperbussmann.com/Surge.

Circuit diagrams

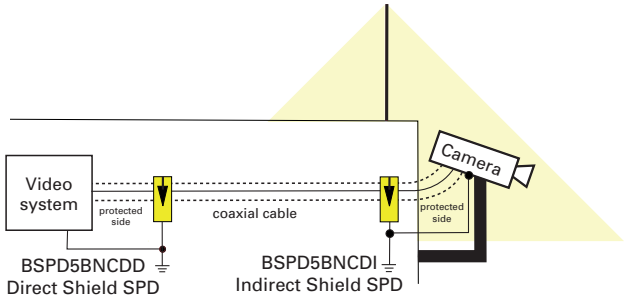


DIN-Rail BNC SPD applications

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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