

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



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

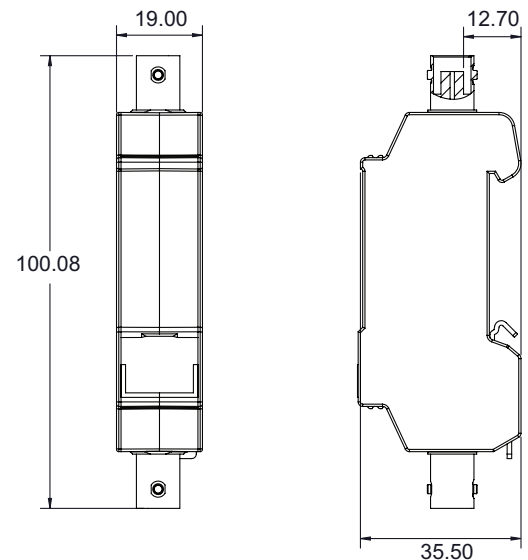
Description:

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



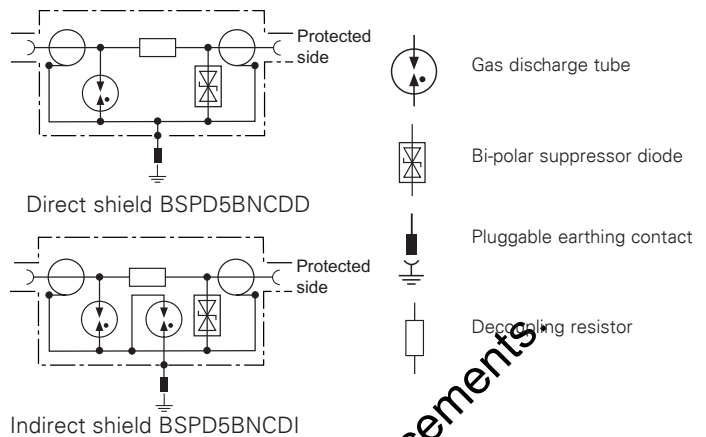
Product obsolete on July 6, 2018. No recommended replacements

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	3 Years*	

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

Circuit diagrams

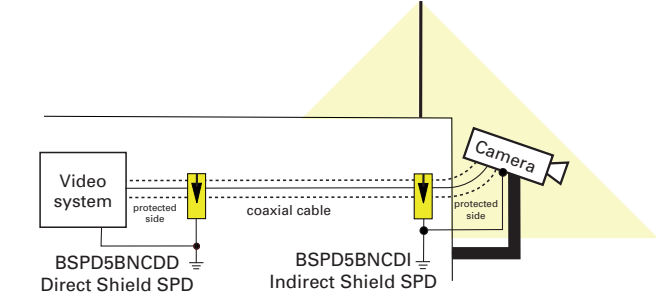


DIN-Rail BNC SPD applications

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.



The only controlled copy of this data sheet is the electronic read-only version located on the Eaton network drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
Eaton.com

Bussmann Division
114 Old State Road
Ellisville, MO 63021
United States
Eaton.com/bussmannseries

© 2016 Eaton
All Rights Reserved
Printed in USA
Publication No. 2158 — BU-SB13141
December 2016

For Eaton's Bussmann series product information, call 1-855-287-7626 or visit: Eaton.com/bussmannseries



Eaton and Bussmann are valuable trademarks of Eaton in the U.S. and other countries. You are not permitted to use the Eaton trademarks without prior written consent of Eaton.

UL is a registered trademark of the Underwriters Laboratories, Inc.

Follow us on social media to get the latest product and support information.