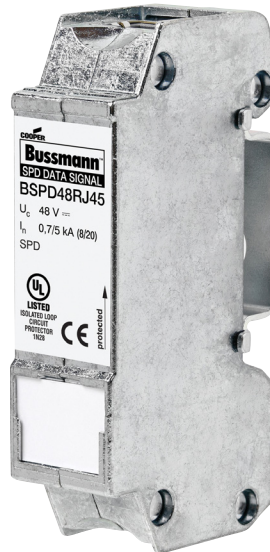


# Universal RJ45 data signal surge protective device for ethernet cable systems



Fulfilling the requirements of Category 6, the BSPD48RJ45 can be universally used for all data services up to nominal voltages of 48V. It is well suited for existing services such as Gigabit Ethernet, ATM, ISDN, Voice over IP and Power over Ethernet (PoE+ acc. to IEEE 802.3at up to 57V) and similar applications in structured cabling systems according to Class E up to 250MHz. Protection of all pairs by means of powerful gas discharge tubes and one adapter filter matrix per pair.

**Agency information**

- UL® 497B Listed
- RoHS compliant

**Features:**

- Easy to install or retrofit for protection of all lines
- CAT 6 according to ISO/IEC 11801
- CAT 6 in the channel (Class E)
- Power over Ethernet (PoE+ according to IEEE 802.3at)

**Catalog number:**

- BSPD48RJ45

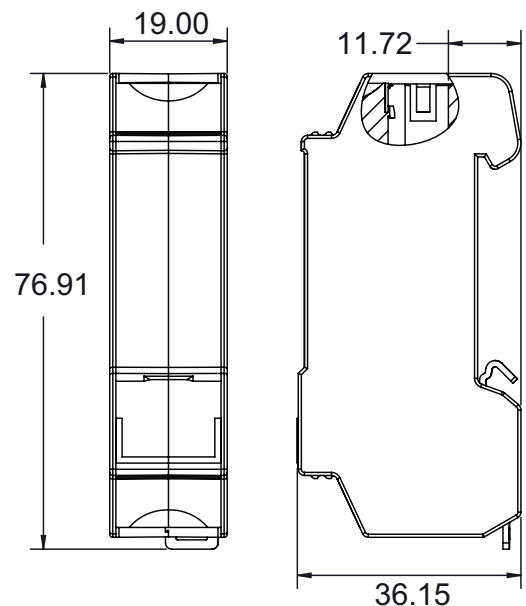
**Description:**

The Bussmann™ series DIN-Rail mount BSPD48RJ45 Surge Protective Device (SPD) for Ethernet cable systems with RJ connectors is easy to install in new, or retrofitting into existing, installations.

The BSPD48RJ45 is installed between the patch panel and the active component (a switch for example).

The snap-in mechanism of the supporting foot allows the SPD to be safely grounded via the DIN-Rail. For single applications, the BSPD48RJ45 comes with a supplied mounting bracket with cable lug.

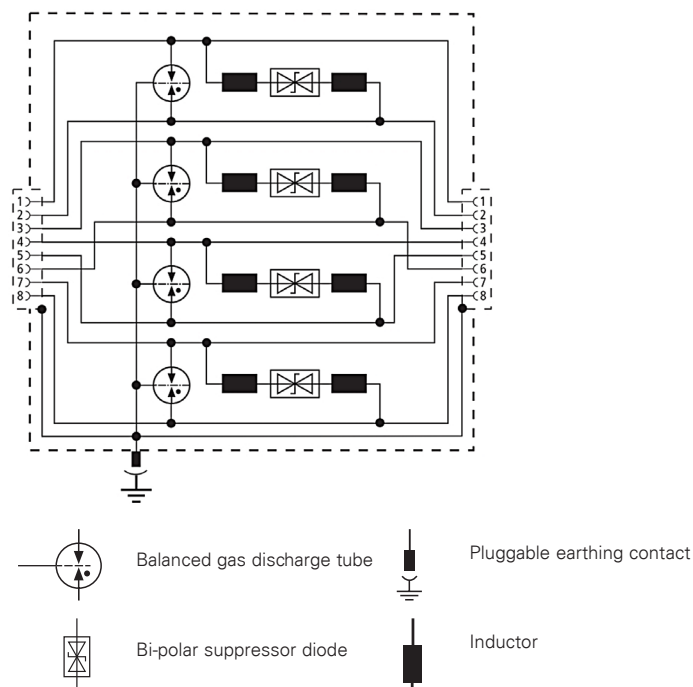
**Dimensions — mm**



**Catalog numbers and specifications**

Catalog number	BSPD48RJ45
Nominal voltage ( $U_N$ )	48 V
Max. continuous operating DC voltage ( $U_C$ )	48 V
Max. continuous operating AC voltage ( $U_C$ )	34 V
Max. continuous DC voltage pair-pair (PoE) ( $U_C$ )	57 V
Nominal current ( $I_L$ )	1 A
C2 Nominal discharge current (8/20 $\mu$ s) line-line ( $I_n$ )	150 A
C2 Nominal discharge current (8/20 $\mu$ s) line-PG ( $I_n$ )	2.5 kA
C2 Total nominal discharge current (8/20 $\mu$ s) line-PG ( $I_n$ )	10 kA
C2 nominal discharge current (8/20 $\mu$ s) pair-pair (PoE) ( $I_n$ )	150 A
Voltage protection level line-line for In C2 ( $U_p$ )	$\leq 190$ V
Voltage protection level line-PG for In C2 ( $U_p$ )	$\leq 600$ V
Voltage protection level line-line for In C2 (PoE) ( $U_p$ )	$\leq 600$ V
Voltage protection level line-line at 1kV/ $\mu$ s C3 ( $U_p$ )	$\leq 180$ V
Voltage protection level line-PG at 1kV/ $\mu$ s C3 ( $U_p$ )	$\leq 500$ V
Voltage protection level pair-pair at 1kV/ $\mu$ s C3 (PoE) ( $U_p$ )	$\leq 600$ V
Insertion loss at 250 MHz	$\leq 3$ dB
Capacitance line-line (C)	$\leq 30$ pF
Capacitance line-PG (C)	$\leq 25$ 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)	RJ45 socket / RJ45 socket
Pinning	1 / 2, 3 / 6, 4 / 5, 7 / 8
Grounding	Via 35mm DIN-Rails 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*

**Circuit diagram**



**DIN-Rail RJ45 SPDs applications**

Catalog number	BSPD48RJ45
Bus systems and measuring, and control technology	
Industrial Ethernet	X
Data networks	
ATM	X
Ethernet 10/100/1000	X
FDDI, CDDI	X
Industrial Ethernet	X
Power over Ethernet (PoE)	X
Token Ring	X
VG Any LAN	X
Video systems	
Video (2 wire)	X

\* See Bussmann series SPD Limited Warranty Statement (3A1502) for details at [Eaton.com/bussmannseries](http://Eaton.com/bussmannseries).

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