

## Surge Protection Devices

## Surge Protection Devices



## Voltage Surge Protectors

### TVS — Cooper Bussmann® Surge<sup>3</sup>™



#### Specifications

**Description:** DIN rail mount voltage surge protection system for AC or DC voltage using diode or MOV technology.

**Dimensions:** See Dimensions illustration.

#### Construction:

Suppressor Module: 20% glass-filled PES (Polyethersulfone) case with 110 copper terminals with electroless tin plating.

DIN Rail Mount Holder: 15% glass-filled PBT (Polybutylene terephthalate) case with electroless tin-plated CDA 7025 interface clips lubricated with fluoroether grease, copper box lugs and stainless steel DIN rail springs.

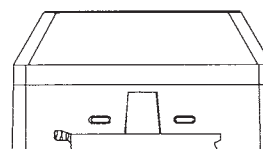
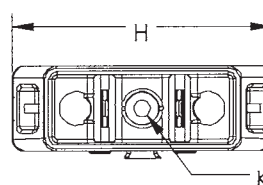
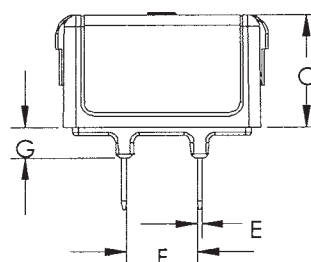
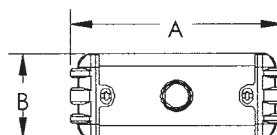
#### Ratings\*:

- Volts: — 12Vdc (2kA surge current)
- 24Vdc (2kA surge current)
- 48Vdc (2kA surge current)
- 120Vac (7kA-18kA surge current)
- 240Vac (7kA-18kA surge current)

\* See Catalog Numbers table for all specifications pertaining to specific voltage ratings.

**Agency Information:** UL Recognized (UL 1449) for AC products, (UL 497B) for DC products, CSA Approved.

#### Dimensions - in (mm)

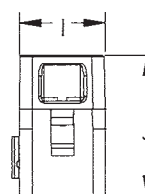


#### Suppressor Module

- A. 1.88 (47.75)
- B. 0.75 (19.05)
- C. 1.00 (25.40)
- D. 0.31 (7.94)
- E. 0.04 (1.02)
- F. 0.63 (15.88)
- G. 0.27 (6.86)

#### DIN Rail Mount Holder

- H. 2.30 (58.42)
- I. 0.76 (19.30)
- J. 1.27 (32.18)
- K. 0.15 (3.81)



**To see our entire surge protection device portfolio, contact your Cooper Bussmann sales representative, the factory or visit our website.**

#### Catalog Numbers

| Catalog Numbers | Voltage Application | MCOV   | Technology | SVR<br>500A, 8x20µs | Surge Current<br>Rating | Agency<br>Information | Label<br>Color |
|-----------------|---------------------|--------|------------|---------------------|-------------------------|-----------------------|----------------|
| TVS12DCD        | 12Vdc               | 14Vdc  | SASD       | 36Vdc               | 2kA                     | UL 497B               | Red            |
| TVS24DCD        | 24Vdc               | 28Vdc  | SASD       | 58Vdc               | 2kA                     | UL 497B               | White          |
| TVS48DCD        | 48Vdc               | 57Vdc  | SASD       | 90Vdc               | 2kA                     | UL 497B               | Black          |
| TVS120ACD       | 120Vac              | 140Vac | SASD       | 330Vac              | 7kA                     | UL 1449               | Blue           |
| TVS120ACM       | 120Vac              | 140Vac | MOV        | 500Vac              | 18kA                    | UL 1449               | Grey           |
| TVS240ACD       | 240Vac              | 280Vac | SASD       | 600Vac              | 7kA                     | UL 1449               | Blue           |
| TVS240ACM       | 240Vac              | 280Vac | MOV        | 800Vac              | 18kA                    | UL 1449               | Grey           |

## Surge Protection Limiters

### TVSS



#### Specifications

**Description:** Surge protection limiters designed to protect TVSS systems. Apply in conjunction with TVS voltage surge protector to provide complete surge protection. Able to withstand 8x20  $\mu$ Sec surge pulses without opening. Limiters are identified by a surge rating and not continuous current rating. Available with optional printed circuit board tabs.

**Dimensions:** See Dimensions illustration.

**Construction:** Melamine tube with nickel-plated brass end caps.

#### Ratings\*:

Volts: — 600Vac

IR: — 200kA RMS Sym.

\* See Catalog Numbers table for all specifications pertaining to specific ratings.

**Agency Information:** CE, UL Recognized 600Vac, File E56412. Designed to protect TVSS systems per UL 1449 Second Edition requirements.

#### Features and Benefits

- Optional tabs for mounting on printed circuit board.

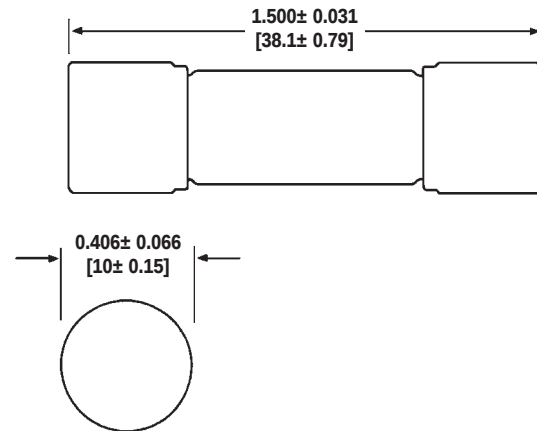
#### Catalog Numbers

| Catalog Numbers | 8x20 $\mu$ S Surge Rating | Melting I <sup>2</sup> t (A <sup>2</sup> Sec) | Clearing I <sup>2</sup> t (A <sup>2</sup> Sec) | I <sub>peak</sub> @ 100kA 60Hz (A) |
|-----------------|---------------------------|-----------------------------------------------|------------------------------------------------|------------------------------------|
| TVSS-5          | 5,000A                    | 559                                           | 1,650                                          | 4,283                              |
| TVSS-10         | 10,000A                   | 1,788                                         | 5,766                                          | 6,618                              |
| TVSS-15         | 15,000A                   | 3,760                                         | 9,730                                          | 7,843                              |
| TVSS-20         | 20,000A                   | 6,020                                         | 14,000                                         | 8,594                              |

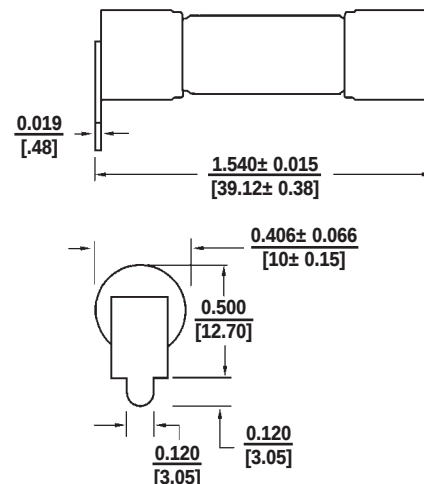
Above catalog numbers are available with printed circuit board tabs. When ordering, use suffix “-01”.

#### Dimensions

##### Ferrule Style



##### Optional Printed Circuit Board Tabs



#### Recommended fuse blocks/fuse holders for 1/2" x 1 1/2" fuses

##### — See Data Sheets

- Open fuse blocks - 1104, 2104
- Finger-safe fuse holders - 1109, 1102, 1103, 2053
- Panel-mount fuse holders - 2114, 2113, 2108
- In-line fuse holders - 2127, 2126



## Fuse Kits & Accessories

Have Products on Hand to Make Electrical  
Service and Repair Faster and Safer

