

# Surge Suppression Devices

Section Contents	Page
TVS Transient voltage surge suppressors . . . . .	360
TVSS Transient surge suppression limiters . . . . .	361



**Transient voltage surge suppressors**

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



**Specifications**

**Description:** DIN rail mount transient voltage surge suppressor 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.

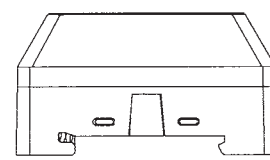
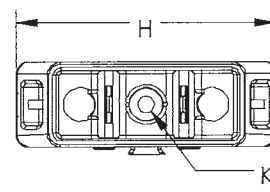
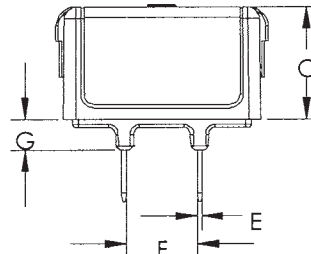
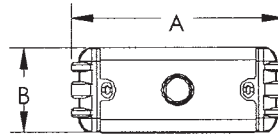
**Ratings\*:**

- 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)**

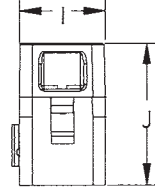


**Suppressor Module**

- 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)



**Catalog Numbers**

Catalog Numbers	Voltage Application*	MCOV	Technology	SVR 500A, 8x20µs	Surge Current Rating	Agency Information	Label 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

Data Sheet: 9006

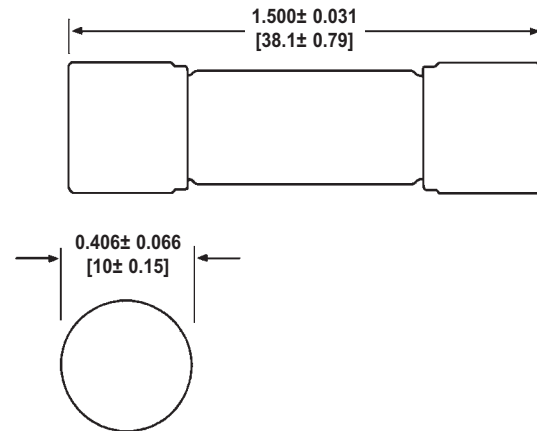
## Transient surge suppression limiters

### TVSS

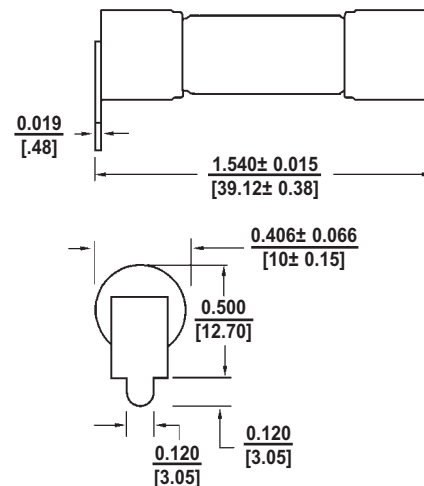


### Dimensions

Ferrule Style



Optional Printed Circuit Board Tabs



### Specifications

**Description:** Transient surge suppression limiters designed to protect TVSS systems. Apply in conjunction with TVS transient voltage surge suppressor to provide complete surge protection. Able to withstand  $8 \times 20 \mu\text{Sec}$  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: — 200,000A 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 $\mu\text{S}$ 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".

**Recommended fuse blocks/fuse holders for  $1\frac{3}{32}$ " x  $1\frac{1}{2}$ " fuses**

— See Data Sheets

- Open fuse blocks - 1104, 2104
- Finger-safe fuse holders - 1109, 1102, 1103, 1151
- Panel-mount fuse holders - 2114, 2113, 2108
- In-line fuse holders - 2127, 2126

Data Sheet: 2141