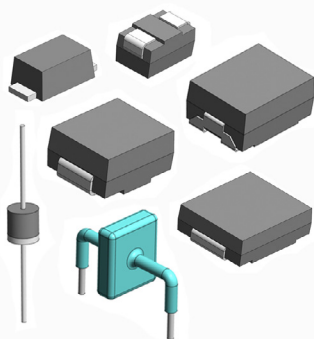




## Eaton high-power TVS diodes

# High-power SMD and through-hole TVS diodes for lightning, EFT and ESD protection



Eaton's high-power transient voltage suppression diodes provide reliable overvoltage protection with very fast response times, low clamping voltage, and high peak current capability.

### Extensive offering

Eaton's high-power transient voltage suppression diodes provide reliable overvoltage protection with very fast response times, low clamping voltage, and high peak current capability in a wide range of applications, including consumer, computing, energy, industrial, and medical devices.

These products are available in surface mount and radial or through-hole footprints and utilize silicon avalanche technology for excellent protection against damaging transients, from ESD up to lightning strikes. The high peak power and current capability of Eaton's TVS diodes combined with very fast-acting response times make them ideal for protecting critical circuits. TVS diode product lines are available in industry-standard sizes for both ESD and high-power suppression.

### Features and benefits






- Common diode packages with multiple reverse working and clamping voltages
- Multiple surface mount and radial or through-hole footprints
- Very fast operation during overvoltage events
- Multiple power ratings within the same package size
- Low clamping voltage to provide superior protection
- A broad product offering for high-power transients






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# High-power TVS diodes: sizes and selection


## Standard TVS diode - surface mount

Photo	Series	Package type	Reverse working voltage	Peak pulse power (10/1000 $\mu$ s)	Peak pulse current (10/1000 $\mu$ s)
	<a href="#">SMF</a>	SOD-123FL	5 to 220 V	200 W	Up to 21.7 A
	<a href="#">SMAJ</a> <a href="#">P4SMA</a>	SMA	5 to 440 V	400 W	Up to 43.5 A
	<a href="#">SMBJ</a> <a href="#">P6SMB</a> <a href="#">10BJ</a>	SMB	5 to 512 V	600 W	Up to 65.2 A
	<a href="#">15BJ</a>	SMBF	5 to 440 V	1500 W	Up to 163 A
	<a href="#">SMCJ</a> <a href="#">SMDJ</a> <a href="#">5.0SMDJ</a>	SMC	5 to 440 V	1500 W	Up to 163 A
			5 to 220 V	3000 W	Up to 326 A
			11 to 170 V	5000 W	Up to 275 A

## High-power TVS diode

Photo	Series	Package type	Reverse working voltage	Peak pulse power (10/1000 $\mu$ s)	Peak pulse current (8/20 $\mu$ s)
	<a href="#">15KPE</a>	Axial (P600/R6)	58 to 200 V	15000 W	-
	<a href="#">SMTJ</a>	SMT-4	58 to 86 V	-	3500 A
	<a href="#">AK1E</a> <a href="#">AK6E</a> <a href="#">AK10E</a>	Radial (0.95" pin to pin)	76 to 430 V	-	1000 A
			15 to 430 V	-	6000 A
			15 to 430 V	-	10000 A

## Surface mount thyristor

Photo	Series	Package type	Peakoff-state voltage	Switching voltage range	Peak pulse current (10/1000 $\mu$ s)
	<a href="#">CPxxxSC</a>	SMB	6 to 340 V	15 to 450 V	100 A

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