



## Surface Mount Transient Voltage Suppressor SM8S26AG RoHS Compliant

Our Product Introduction

### Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: UL, REACH, RoHS, ISO
- Model Number: SM8S26AG
- Minimum Order Quantity: 500PCS
- Price: Negotiable
- Delivery Time: 5-8 work days



### Product Specification

- Product Name: TVS Diodes
- Package Type: DO-218AB
- Vr: 26V
- Ir@Vr @25 : 5 $\mu$ A
- Ir@Vr @175 : 150 $\mu$ A
- Vbr@It (Min.): 28.9V
- Vbr@It (Max.): 31.9V
- It: 5mA
- Vc@Ipp: 42.1V
- Ipp: 157A
- Storage Temperature: -55°C To +175°C
- Highlight: **Surface Mount Transient Voltage Suppressor, Transient Voltage Suppressor RoHS**

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## Product Description

### Surface Mount Transient Voltage Suppressor SM8S26AG, RoHS Compliant

**DATASHEET:** [SM8SXXG Series\\_v2309.1.pdf](#)

#### Description:

The SM8S series is designed specifically to protect sensitive electronic equipment from voltage transients induced by lightning and other transient voltage events.

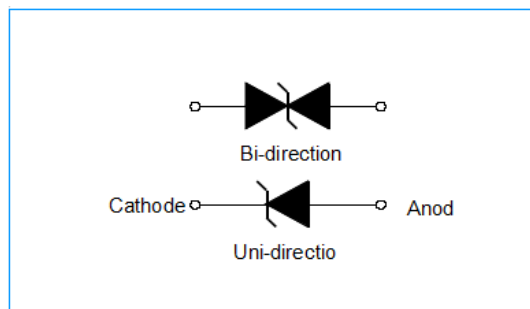
Part Number		Working Peak Reverse Voltage $V_{RWM}$ (V)	Breakdown Voltage $V_{BR}$ (V)		Test Current $I_T$ (mA)	Maximum Reverse Leakage $I_R$ @ $V_{RWM}$ ( $\mu$ A)	Maximum $I_R$ @ $V_{RWM}$ $T_J=175$ ( $\mu$ A)	Maximum Reverse Surge Current $I_{PP}$ (A)	Maximum Clamping Voltage $V_C$ @ $I_{PP}$ (V)
			Min.	Max.					
Uni	Bi								
SM8S26AG	SM8S26CAG	26.0	28.9	31.9	5.0	10	150	157	42.1

#### Notes:

- Surge current waveform is defined at 10/1000 $\mu$ S waveform.
- For all types maximum  $V_F = 1.8$  V at  $I_F = 100$  A measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

#### Features:

- Optimized glass passivated chip.
- $T_J=175$  capability suitable for high reliability and automotive requirement.
- 6600W peak pulse power capability with a 10/1000 $\mu$ s waveform, repetitive rate (duty cycle): 0.01 %.
- Meet ISO7637-2 5a/5b and ISO 16750 load dump test (varied by test condition).
- Meet AEC-Q101 qualified.
- Low leakage current.
- Low forward voltage drop.
- Excellent clamping capability.
- Very fast response time.
- RoHS compliant.



#### Product Features:

- High reliability, compliant with automotive standard AEC-Q101 certification;
- Comply with ISO 7637-2-5a load dump test (see model and test level for details);
- Glass passivated chip;
- Low residual pressure and low leakage flow;
- Fast response time;
- Complete package types and compatible with most protective components on the market;

#### Application areas:

- Car entertainment system
- Car navigation system and driving recorder
- Reversing radar
- Car power supply
- Car heated seat cushion
- Anti-theft device
- Car massage cushion
- Car MP3 player
- Vehicle motor control system



#### About TVS Diode

referred to as TVS, is a high-efficiency circuit protection device in the form of a diode. When the two poles of the TVS diode are impacted by reverse transient high energy, it can change the high impedance between the two poles into low impedance at a speed of 10-12 seconds, absorbing surge power up to several kilowatts, causing the two poles to The voltage between them is clamped at a predetermined value, effectively protecting precision components in electronic circuits from damage by various surge pulses. Specifically, it has the following three characteristics: 1. Adding TVS diodes to signal and power lines can prevent microprocessors or microcontrollers from instantaneous surges, such as electrostatic discharge effects, AC power surges and switching power supply noise. of failure. 2. The electrostatic discharge effect can release pulses of more than 10,000V and 60A, and can last for 10ms; while ordinary TTL devices will be damaged when encountering 10V pulses of more than 30ms. The use of TVS diodes can effectively absorb pulses that can cause device damage and eliminate interference (Crosstalk) caused by switching between buses. 3. Placing TVS diodes between signal lines and ground can prevent data and control buses from being affected by unnecessary noise.

