



## Automotive Protection TVS Circuit Protection Components Diodes SM8S22CAG

Our Product Introduction

### Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: UL, REACH, RoHS, ISO
- Model Number: SM8S22CAG
- Minimum Order Quantity: 500PCS
- Price: Negotiable
- Delivery Time: 5-8 work days



### Product Specification

- Package Type: DO-218AB
- Vr: 22V
- Ir@Vr @25 : 5μA
- Ir@Vr @175 : 150μA
- Vbr@It (Min.): 24.4V
- Vbr@It (Max.): 26.9V
- It: 5mA
- Vc@Ipp: 35.5V
- Ipp: 186A
- Highlight: **TVS Circuit Protection Components,  
Automotive Circuit Protection Components,  
TVS Circuit Protection Diode**

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## Product Description

### SOCAY TVS Diodes SM8S22CAG, Excellent Clamping Capability

**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)
Uni	Bi		Min.	Max.					
SM8S22AG	SM8S22CAG	22.0	24.4	26.9	5.0	10	150	186	35.5

#### 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.

#### Application:

Automotive Protection.





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