



24V SM8S24CAG Circuit Protection Components DO-218AB Package Automotive TVS Diode

Our Product Introduction

Basic Information

- Place of Origin: Shenzhen, Guangdong, China
- Brand Name: SOCAY
- Certification: UL, REACH, RoHS, ISO
- Model Number: SM8S24CAG
- Minimum Order Quantity: 500PCS
- Price: Negotiable
- Delivery Time: 5-8 work days



Product Specification

- Product Name: TVS Diodes
- Package Type: DO-218AB
- Vr: 24V
- Ir@Vr @25 : 5μA
- Ir@Vr @175 : 150μA
- Vbr@It (Min.): 26.7V
- Vbr@It (Max.): 29.5V
- It: 5mA
- Vc@Ipp: 38.9V
- Ipp: 170A
- Storage Temperature: -55°C To +175°C
- Highlight: 24V Circuit Protection Components,
DO-218AB Circuit Protection Components,
DO-218AB Automotive TVS Diode

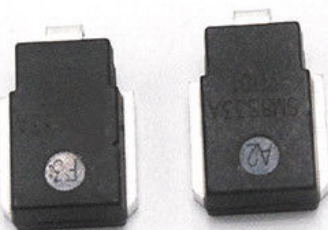


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Product Description

24V SM8S24CAG Circuit Protection Components DO-218AB Package Automotive TVS Diode

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} (μA)	Maximum I_R @ V_{RWM} $T_J=175$ (μA)	Maximum Reverse Surge Current I_{PP} (A)	Maximum Clamping Voltage V_C @ I_{PP} (V)
Uni	Bi		Min.	Max.					
SM8S10 AG	SM8S10C AG	10.0	11.1	12.3	5.0	15	250	388	17.0
SM8S11 AG	SM8S11C AG	11.0	12.2	13.5	5.0	10	150	363	18.2
SM8S12 AG	SM8S12C AG	12.0	13.3	14.7	5.0	10	150	332	19.9
SM8S13 AG	SM8S13C AG	13.0	14.4	15.9	5.0	10	150	307	21.5
SM8S14 AG	SM8S14C AG	14.0	15.6	17.2	5.0	10	150	284	23.2
SM8S15 AG	SM8S15C AG	15.0	16.7	18.5	5.0	10	150	270	24.4
SM8S16 AG	SM8S16C AG	16.0	17.8	19.7	5.0	10	150	254	26.0
SM8S17 AG	SM8S17C AG	17.0	18.9	20.9	5.0	10	150	239	27.6
SM8S18 AG	SM8S18C AG	18.0	20.0	22.1	5.0	10	150	226	29.2
SM8S20 AG	SM8S20C AG	20.0	22.2	24.5	5.0	10	150	204	32.4
SM8S22 AG	SM8S22C AG	22.0	24.4	26.9	5.0	10	150	186	35.5
SM8S24 AG	SM8S24C AG	24.0	26.7	29.5	5.0	10	150	170	38.9

Notes:

1. Surge current waveform is defined at 10/1000 μ S waveform.
2. 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.

Overview of automotive TVS transient suppression diodes**1. Wide application of automotive TVS transient suppression diodes**

Car-grade TVS diodes are a common protection device in practical applications. They are widely used in: car entertainment systems, reversing radars, car power supplies, anti-theft devices, car navigators, driving recorders, car heated seat cushions, and car massage seats. chairs, car MP3 players, car motor control systems. With the vigorous development of science and technology and information technology, vehicle-mounted electronic products are becoming more and more integrated and modular. In order to ensure the stable and reliable operation of vehicle-mounted electronic products, more stringent and demanding requirements must be put forward for the technical parameters of electronic protection devices and manufacturers.Require.

2. Parameter requirements for automotive TVS transient suppression diodes

nS level response speed, low residual voltage, low leakage current, compliant with ISO 7637-2-5A/5B load dump test, high reliability, and compliant with automotive AEC-Q101 electronic device requirements.

3. Manufacturer system certification requirements

Passed the automotive **industry IATF16949 system certification**

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 μ 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.

Packaging

Part Number	Component Package	Quantity	Packaging Option
SM8SXXG Series	DO-218AB	500 PCS	13" diameter plastic tape and reel, anode towards the sprocket hole

Application:

Automotive Protection.

Description of commonly used TVS diodes in SM8S series

SM8S series TVS diodes are automotive-grade anti-surge protection devices. Different types of automotive TVS diode products are used according to the voltage levels of 12V, 24V, etc. in the circuit, such as SM8S36A, SM8S30A, SM8S24A, SM8S26A, SM8S28A. , SM8S33A, etc.



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