

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Low Forward Voltage and High Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance(Note 1): 125°C/W Junction to Ambient
- Typical Thermal Resistance(Note 1): 30°C/W Junction to Lead
- Typical Thermal Resistance(Note 1): 40°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SM5819PE	14S	40V	28V	40V

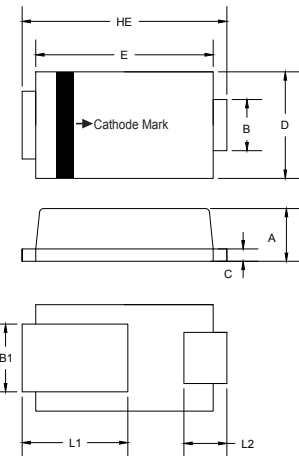
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	Fig.1
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	0.55V 0.46V	$I_{FM}=1.0A; T_J=25°C^*$ $I_{FM}=1.0A; T_J=125°C^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.1mA 10mA	$T_J=25°C$ $T_J=125°C$

*Pulse Test: Pulse Width 300 μsec, Duty Cycle 1%
 Note :1. $R_{θJA}$ and $R_{θJL}$ Mounted on PCB With 6.0 mm x 6.0 mm Copper Pad Areas
 $R_{θJC}$ is measured at the top center of the body.

**1 Amp
Schottky Rectifier
40 Volts**

SOD-323HE



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.022	0.030	0.550	0.750	
B	0.021	0.029	0.530	0.730	
B1	0.028	0.036	0.720	0.920	
C	0.004	0.010	0.100	0.250	
D	0.047	0.055	1.200	1.400	
E	0.081	0.089	2.050	2.250	
L1	0.047	0.055	1.200	1.400	
L2	0.016	0.024	0.400	0.600	
HE	0.094	0.102	2.400	2.600	

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

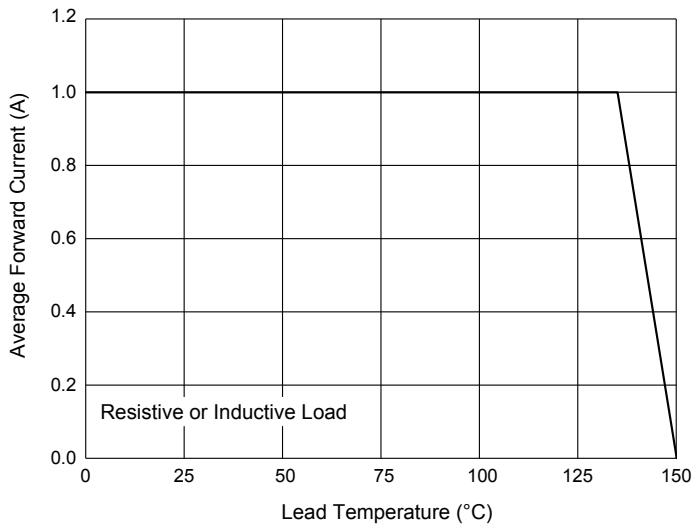


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

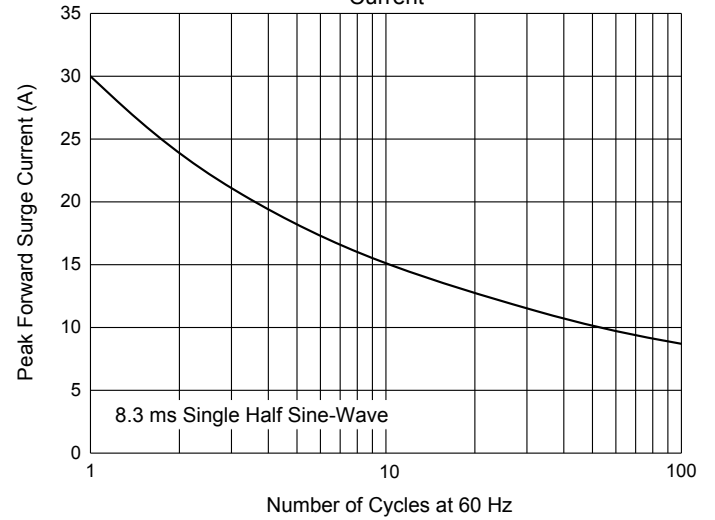


Fig. 3 - Typical Instantaneous Forward Characteristics

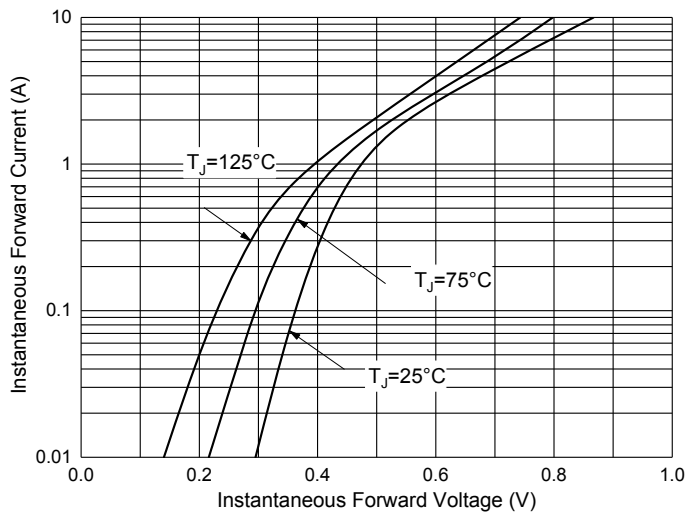
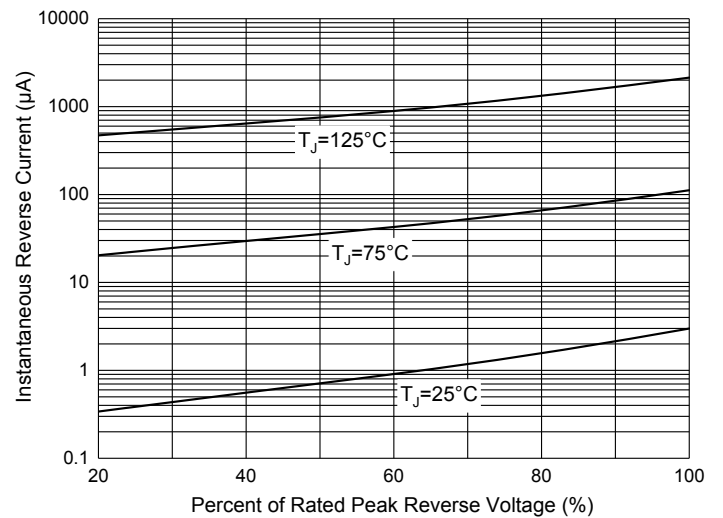


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
SM5819PE-TP	Tape&Reel: 4.5 Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. SM5819PE-TP-HF

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