

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- High Current Capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Guardring For Overvoltage Protection.
- Silicon Epitaxial Planar Chip, Metal Silicon Junction
- 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: 60°C/W Junction to Ambient^(Note 2)
- Typical Thermal Resistance: 28°C/W Junction to Case^(Note 2)
- Typical Thermal Resistance: 6°C/W Junction to Lead^(Note 2)

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SMD33LHE1	T3	30V	21V	30V

Electrical Characteristics @ 25°C Unless Otherwise Specified

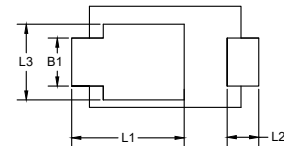
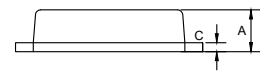
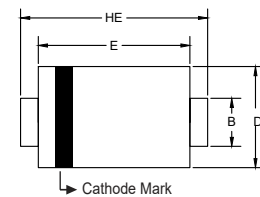
Average Forward Current	$I_{F(AV)}$	3.0A	$T_L = 125^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	80A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	0.42V(Max) 0.38V(Typ)	$I_{FM}=3.0A;$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	120µA	$V_R=30V; T_J=25^\circ\text{C}$
Typical junction capacitance	C_J	150pF	4.0 V, 1 MHz

Note :

1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.
2. Thermal Resistance: Mounted on PCB with 0.2*0.2"(5*5mm) copper pads, 2 OZ,FR4 PCB.

**3 Amp Low VF
Schottky Rectifier
30 Volts**

SOD-123HE1



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.030	0.035	0.75	0.90	
B	0.033	0.041	0.85	1.05	
B1	0.033	0.041	0.85	1.05	
C	0.004	0.010	0.10	0.25	
D	0.075	0.083	1.90	2.10	
E	0.114	0.122	2.90	3.10	
L1	0.079	0.096	2.00	2.45	
L2	0.016	0.033	0.40	0.85	
L3	0.051	0.067	1.30	1.70	
HE	0.138	0.154	3.50	3.90	

Curve Characteristics

Fig. 5 - Forward Current Derating Curve

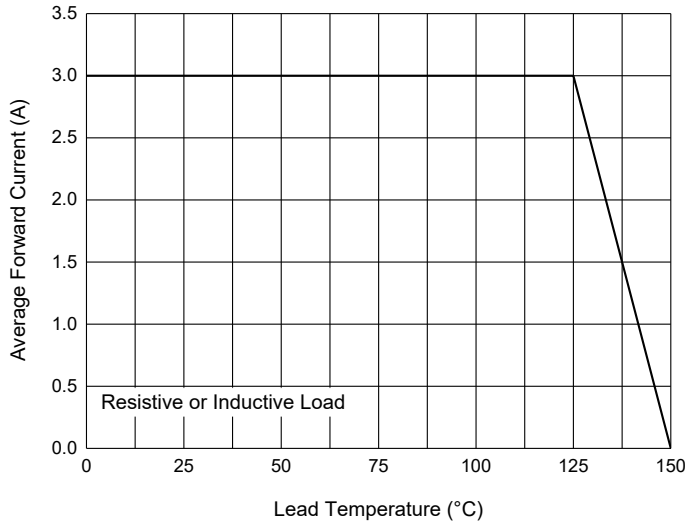


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

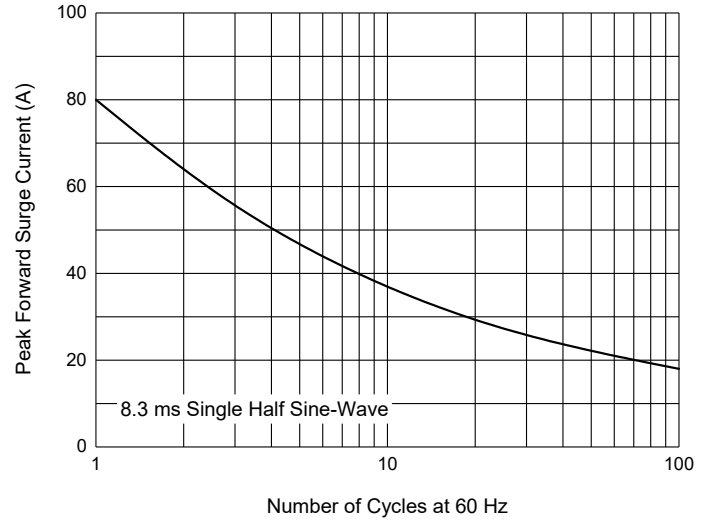


Fig. 3 - Typical Instantaneous Forward Characteristics

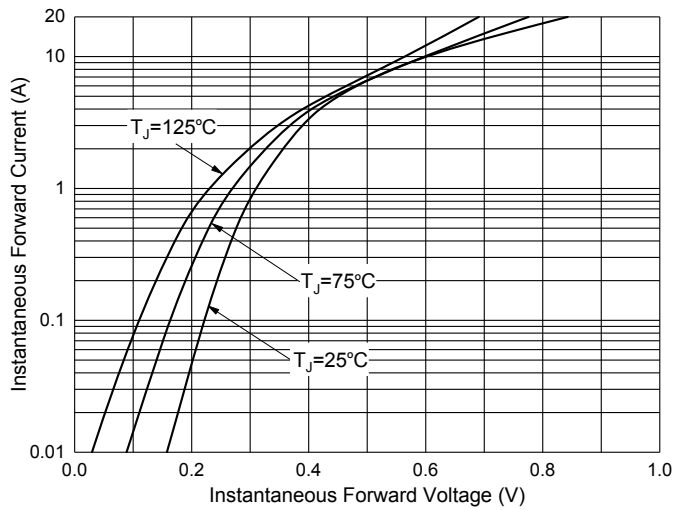


Fig. 4 - Typical Reverse Leakage Characteristics

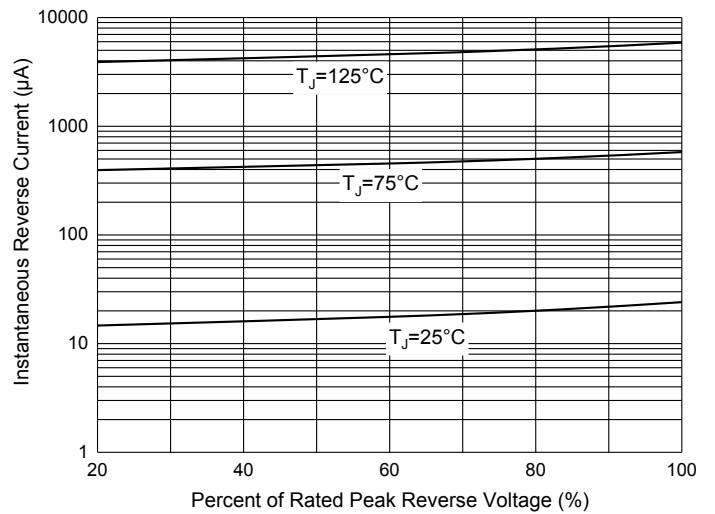
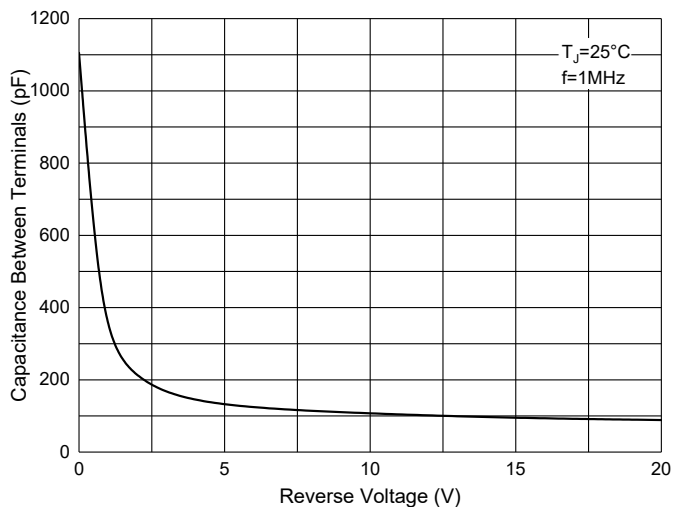


Fig. 5 - Capacitance Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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

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