

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: 6°C/W Junction to Lead(Note 2)
- Typical Thermal Resistance: 28°C/W Junction to Case(Note 3)
- Typical Thermal Resistance: 60°C/W Junction to Ambient(Note 2)

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SMD34LHE1	T4	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

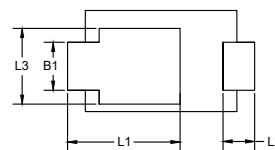
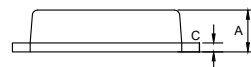
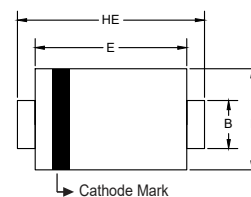
Average Forward Current	$I_{F(AV)}$	3.0A	$T_L = 125^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	80A	8.3ms, Half Sine
Instantaneous Forward Voltage	V_F	0.45V(Max) 0.41V(Typ)	$I_{FM}=3.0A;$
DC Reverse Current at Rated DC Blocking Voltage	I_R	120 μ A(Max) 30 μ A(Typ)	$V_R=40V; T_J=25^\circ\text{C}$
Typical Junction Capacitance	C_J	210pF	$V_R=4V, f=1\text{MHZ}$

Note :

1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.
2. The Thermal Resistance From Junction to Ambient or Lead, Mounted on P.C.B With 5x5mm Copper Pads, 2 OZ, FR4 PCB.
3. The Thermal Resistance From Junction to Case, Mounted on P.C.B With Recommended Copper Pads, 2 OZ, FR4 PCB.

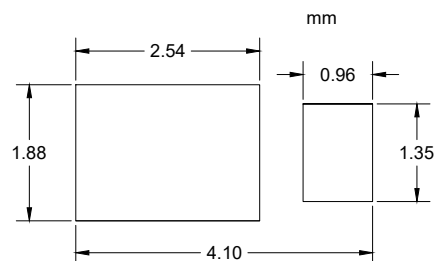
3 Amp Low VF Schottky Rectifier 40 Volts

SOD-123HE1



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

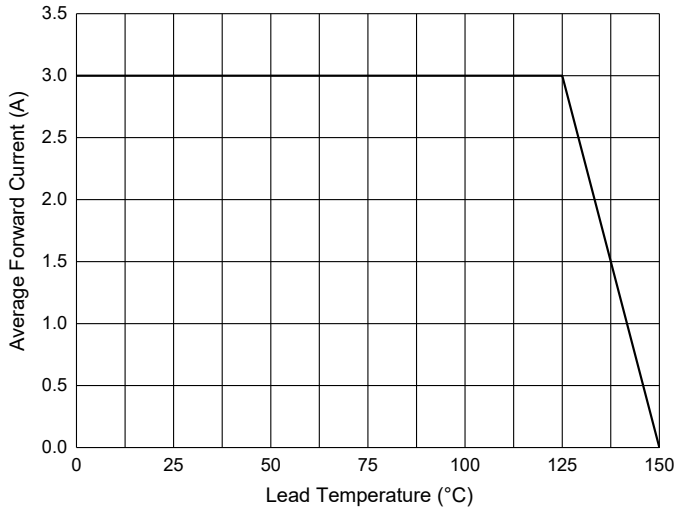


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

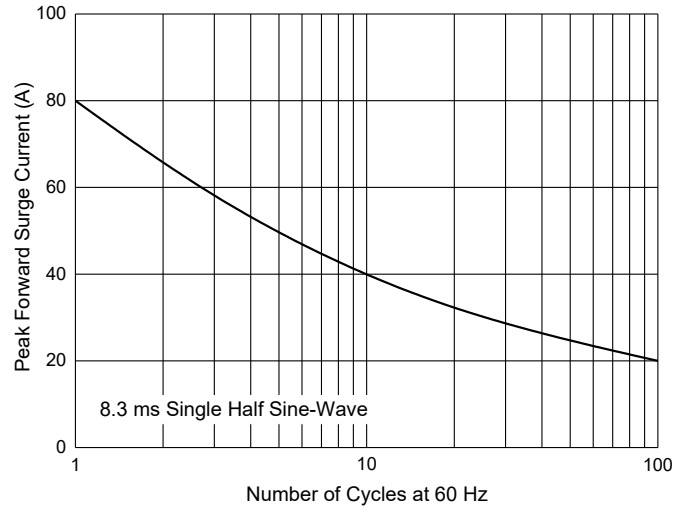


Fig. 3 - Typical Instantaneous Forward Characteristics

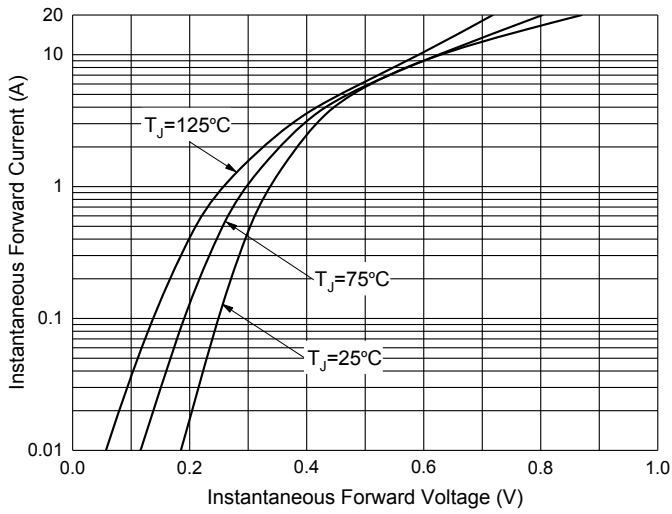
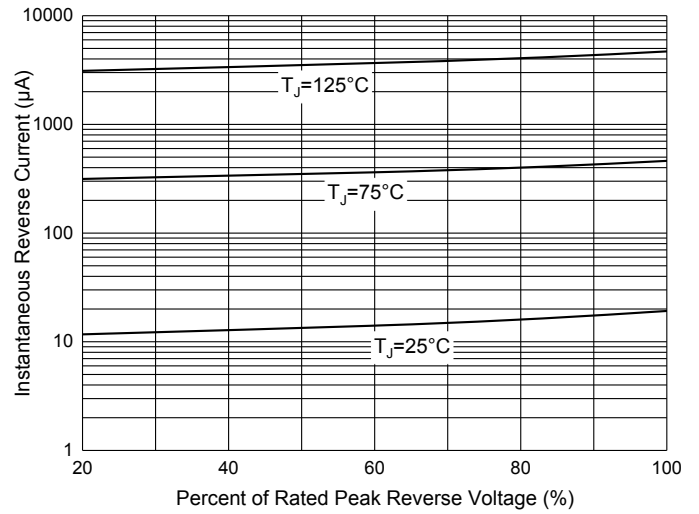


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

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

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

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