

## Features

- Halogen Free. "Green" Device (Note 1)
- 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 2): 125°C/W Junction to Ambient
- Typical Thermal Resistance(Note 2): 30°C/W Junction to Lead
- Typical Thermal Resistance(Note 2): 40°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SMD14PE	14	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
Instantaneous Forward Voltage	$V_F$	0.42V(Typ.) 0.48V(Typ.) 0.52V(Max.) 0.32V(Typ.) 0.41V(Typ.)	$I_F=0.5A; T_J=25^\circ C$ $I_F=1.0A; T_J=25^\circ C$ $I_F=1.0A; T_J=25^\circ C$ $I_F=0.5A; T_J=125^\circ C$ $I_F=1.0A; T_J=125^\circ C$
DC Reverse Current At Rated DC Blocking Voltage	$I_R$	50µA(Max.) 7.5µA(Typ.) 10mA(Max.) 3mA(Typ.)	$T_J=25^\circ C$ $T_J=125^\circ C$

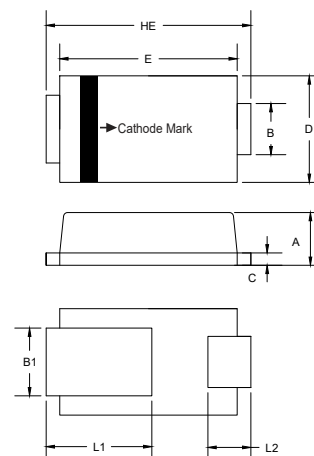
\*Pulse Test: Pulse Width 300 µsec, Duty Cycle 1%

Note :

1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2.  $R_{\theta JA}$  and  $R_{\theta JL}$  Mounted on PCB With 6.0 mm x 6.0 mm Copper Pad Areas  $R_{\theta JC}$  is measured at the top center of the body.

# 1 Amp Schottky Rectifier 40 Volts

## SOD-323HE



### DIMENSIONS

DIM	INCHES		MM		NOTE
	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

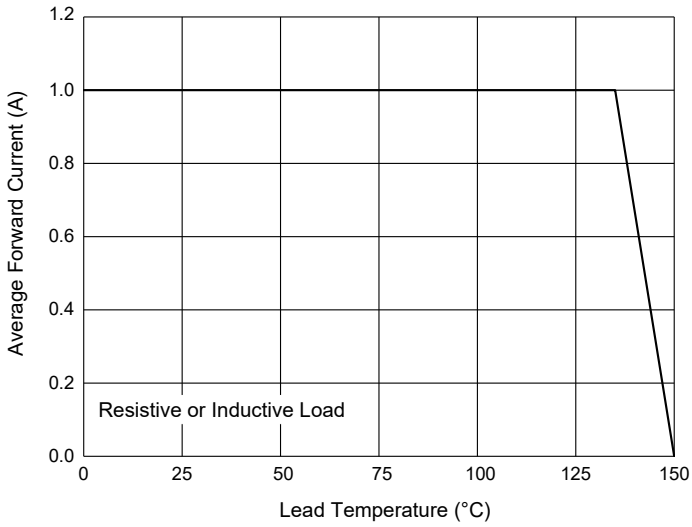


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

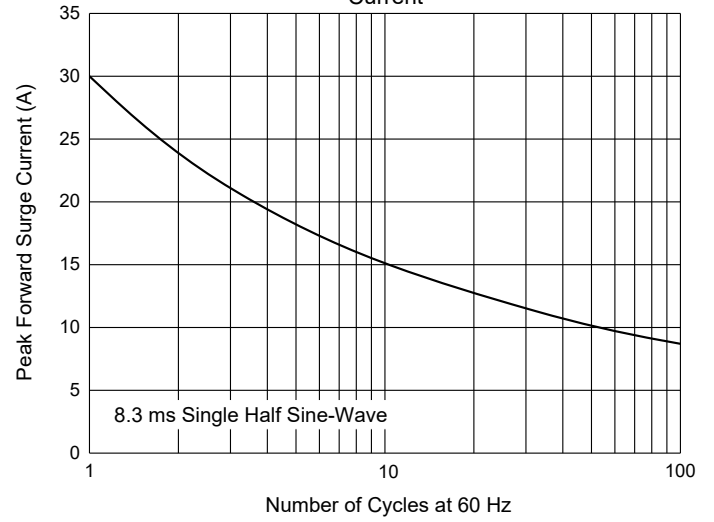


Fig. 3 - Typical Instantaneous Forward Characteristics

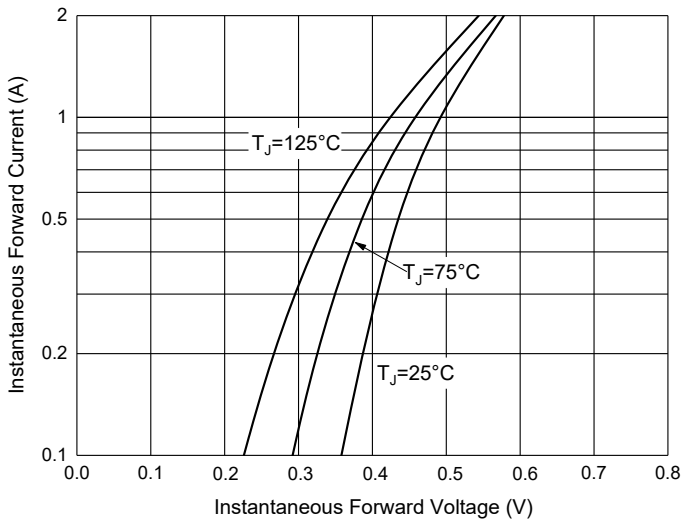
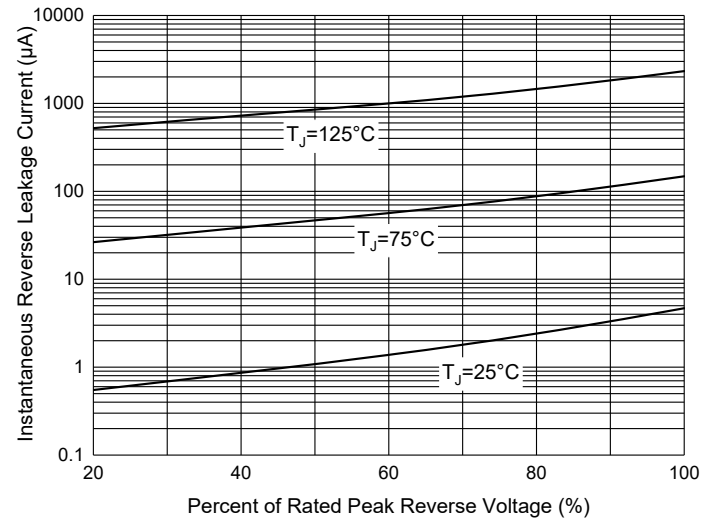


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
SMD14PE-TP	Tape&Reel: 4.5 Kpcs/Reel

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