

## Features

- Halogen Free. "Green" Device (Note 1)
- AEC-Q101 Qualified
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- For Surface Mount Applications
- Extremely Low Thermal Resistance
- Easy Pick And Place
- High Current Capability With Low Forward Voltage
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

## Maximum Ratings

- Operating Junction Temperature Range:SK32BHE3-L~SK34BHE3-L: -55°C to +125°C
- Operating Junction Temperature Range:SK35BHE3-L~SK310BHE3-L: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 10°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK32BHE3-L	SK32B	20V	14V	20V
SK33BHE3-L	SK33B	30V	21V	30V
SK34BHE3-L	SK34B	40V	28V	40V
SK35BHE3-L	SK35B	50V	35V	50V
SK36BHE3-L	SK36B	60V	42V	60V
SK38BHE3-L	SK38B	80V	56V	80V
SK310BHE3-L	SK310B	100V	70V	100V

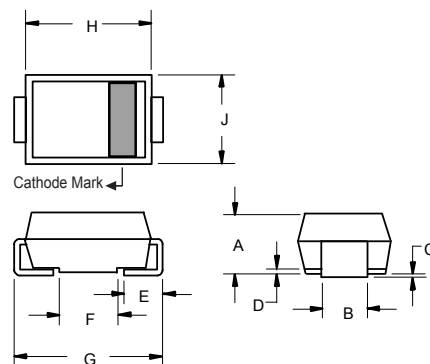
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0A	$T_L=105^\circ\text{C}$ (SK32BHE3-L~SK34BHE3-L) $T_L=125^\circ\text{C}$ (SK35BHE3-L~SK310BHE3-L)
Peak Forward Surge Current	$I_{FSM}$	100A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	0.50V 0.75V 0.85V	$I_{FM}=3.0A$ ; $T_J=25^\circ\text{C}$ (Note 3)
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.1mA 10mA	$T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$
Typical Junction Capacitance	$C_J$	210pF 160pF 125pF	Measured at 1.0MHz, $V_R=4.0V$

- 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. High Temperature Solder Exemptions Applied, see EU Directive Annex 7a.  
3. Pulse test: Pulse width 200  $\mu\text{sec}$ , Duty cycle 2%

# 3 Amp Schottky Rectifier 20 to 100 Volts

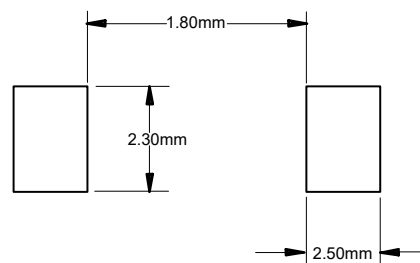
## SMB (DO-214AA)



## DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.075	0.087	1.91	2.21	
C	0.002	0.008	0.05	0.20	
D	0.006	0.012	0.15	0.31	
E	0.030	0.060	0.76	1.52	
F	0.065	0.091	1.65	2.32	
G	0.200	0.220	5.08	5.59	
H	0.160	0.191	4.06	4.85	
J	0.130	0.155	3.30	3.94	

## Suggested Solder Pad Layout



**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

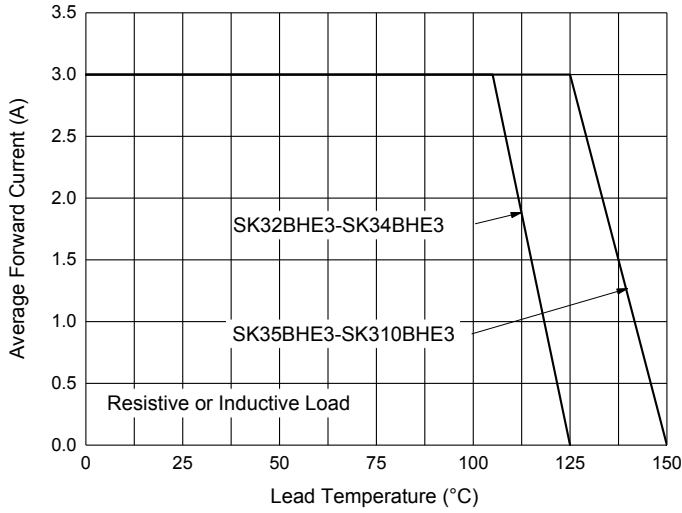


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

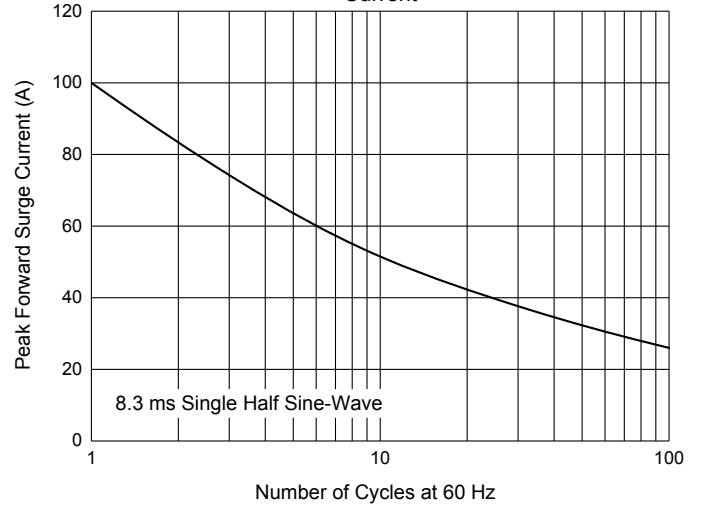


Fig. 3 - Typical Instantaneous Forward Characteristics

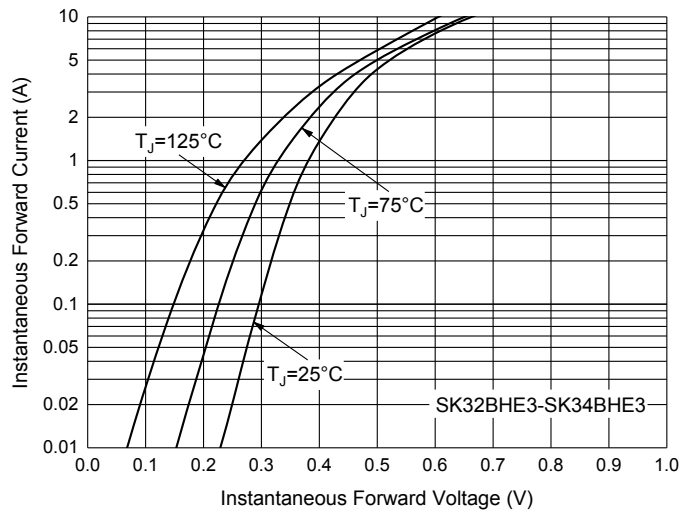


Fig. 4 - Typical Instantaneous Forward Characteristics

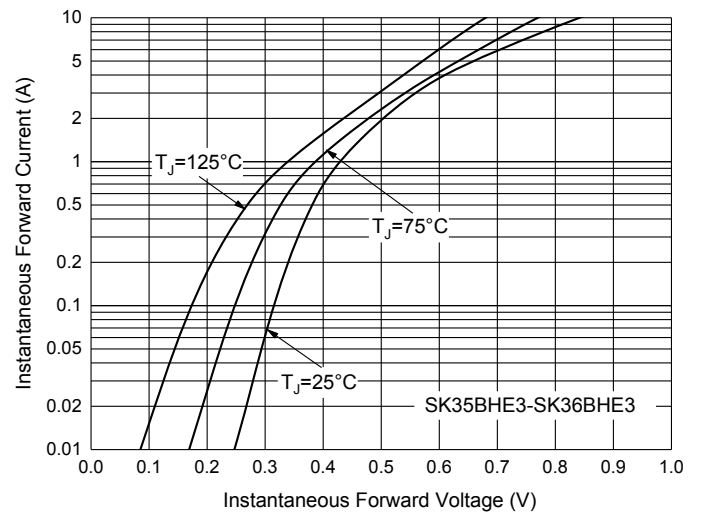


Fig. 5 - Typical Instantaneous Forward Characteristics

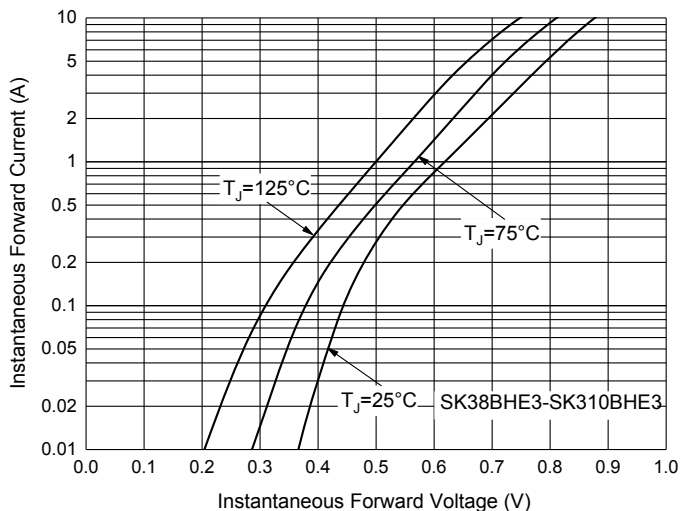
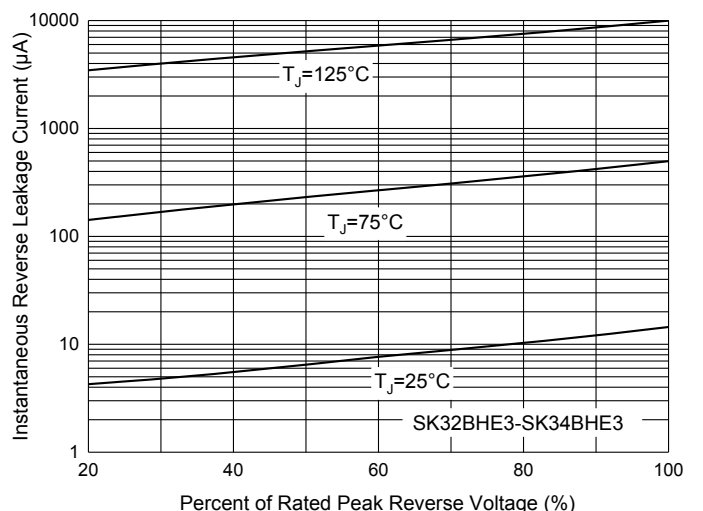


Fig. 6 - Typical Reverse Leakage Characteristics



**Curve Characteristics**

Fig. 7 - Typical Reverse Leakage Characteristics

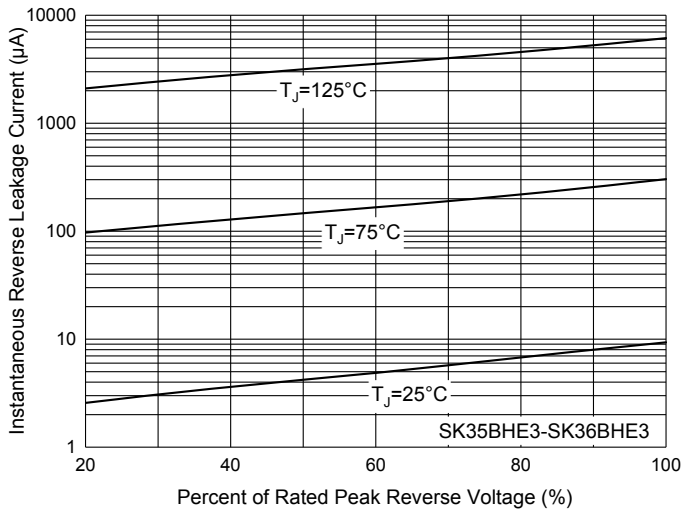
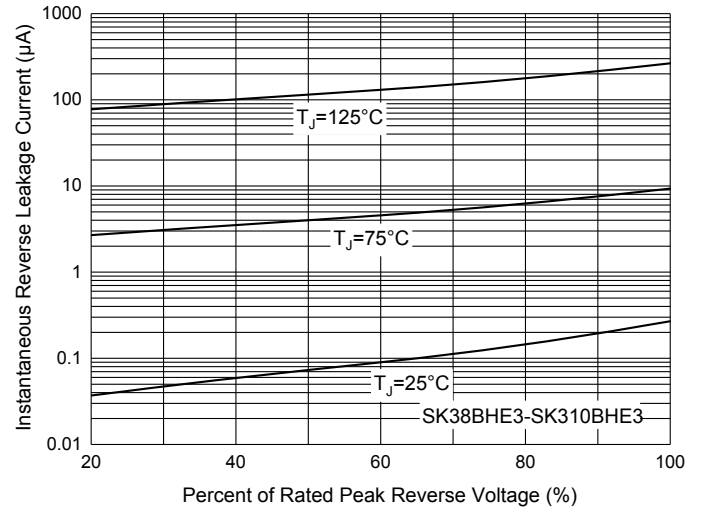


Fig. 8 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
SK32BHE3-LTP~SK310BHE3-LTP	Tape&Reel: 3Kpcs/Reel

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