

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- High Current Capability With Low Forward Voltage
- For Surface Mount Applications
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 2)
- High Junction Temperature Capability

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Thermal Resistance: 16°C/W Junction to Lead
- Thermal Resistance: 55°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK510BH-L	SK510BH	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	5.0A	$T_L=120^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	100A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	0.85V	$I_{FM}=5.0A; T_J=25^\circ\text{C}^*$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	5 μA 1mA	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$

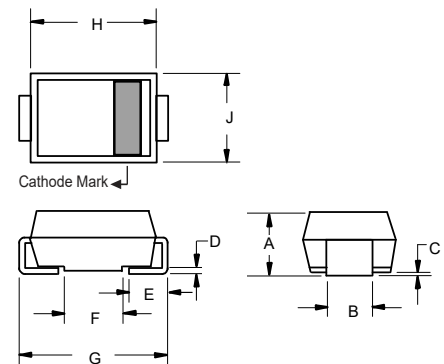
*Pulse test: Pulse width 200 μsec , Duty cycle 2%

Note:

1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.
2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

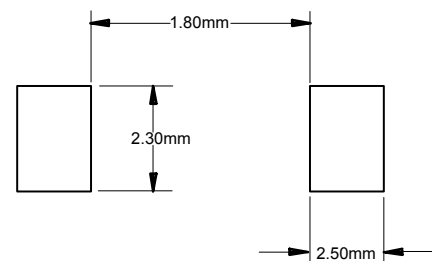
5 Amp Schottky Rectifier 100 Volts

SMB (DO-214AA)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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

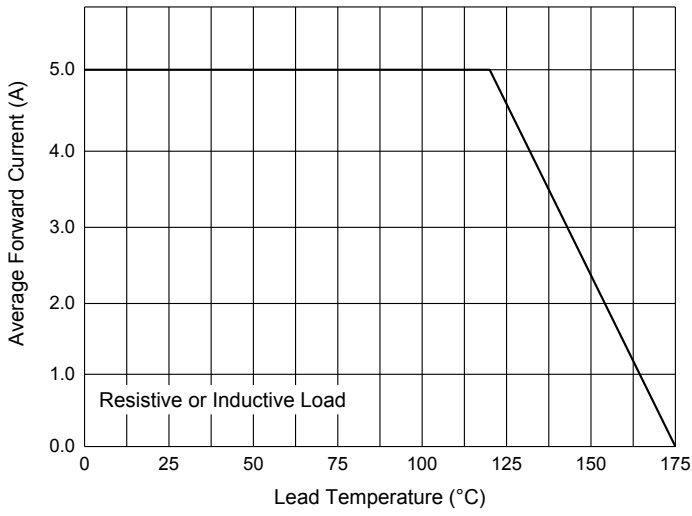


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

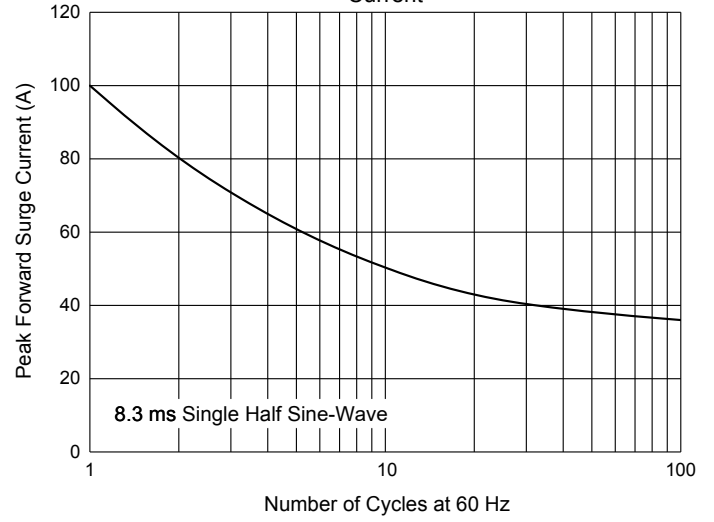


Fig. 3 - Typical Instantaneous Forward Characteristics

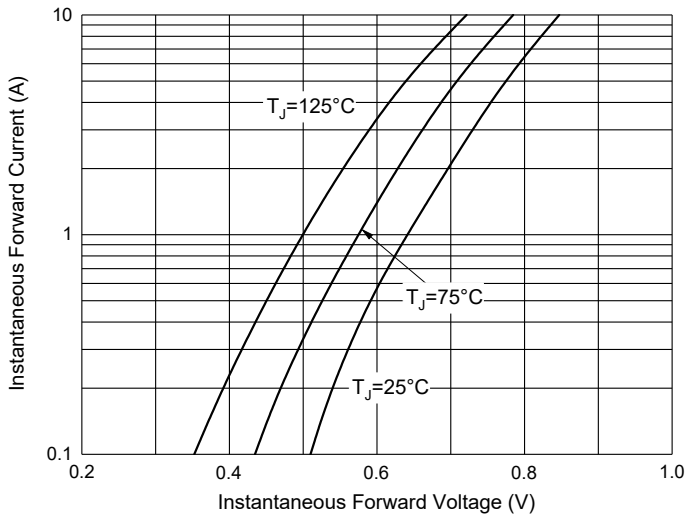
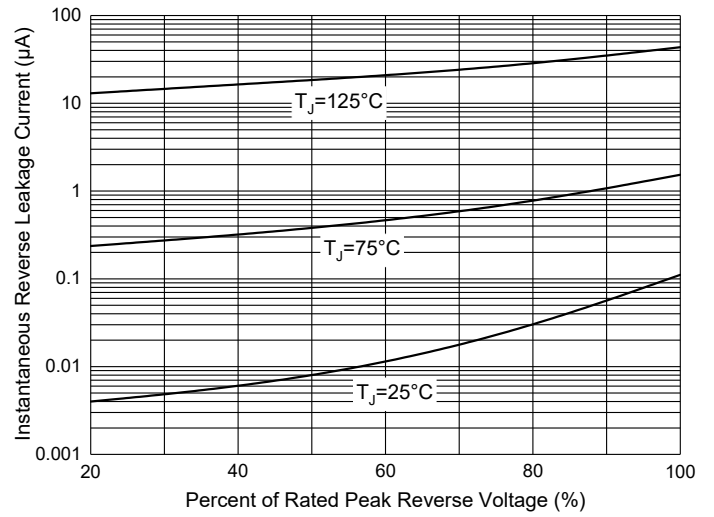


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
SK510BH-LTP	Tape&Reel: 3Kpcs/Reel

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