

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Reverse Energy Tested and Guard Ring Protection
- High Current Capability and Low Forward Voltage
- Extremely Low Thermal Resistance
- Halogen Free. "Green" Device (Note 2)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C(SK12-L~SK14-L)
- Operating Junction Temperature Range: -55°C to +150°C(SK15-L~SK110-L)
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 15°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK12-L	SK12	20V	14V	20V
SK13-L	SK13	30V	21V	30V
SK14-L	SK14	40V	28V	40V
SK15-L	SK15	50V	35V	50V
SK16-L	SK16	60V	42V	60V
SK18-L	SK18	80V	56V	80V
SK110-L	SK110	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	$T_L=75^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage SK12-L~SK14-L SK15-L~SK16-L SK18-L~SK110-L	V_F	0.5V 0.70V 0.85V	$I_{FM}=1.0A$; $T_J=25^\circ\text{C}$
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 SK12-L~SK14-L SK15-L~SK16-L SK18-L~SK110-L	C_J	130pF 90pF 70pF	Measured at 1.0MHz $V_R=4.0V$

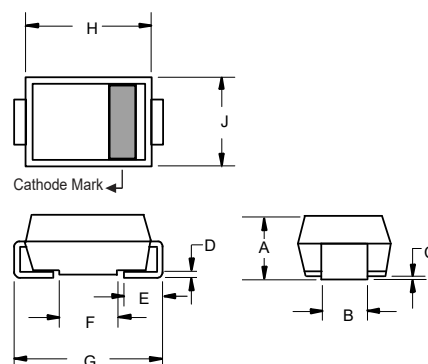
*Pulse test: Pulse width 300 μsec , Duty cycle 2%

Note:

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

1 Amp Schottky Rectifier 20 to 100 Volts

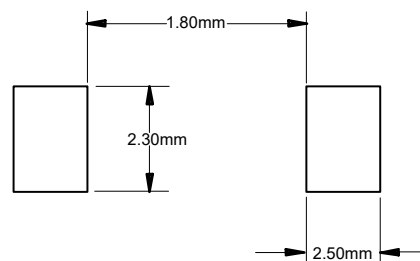
SMB (DO-214AA)



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

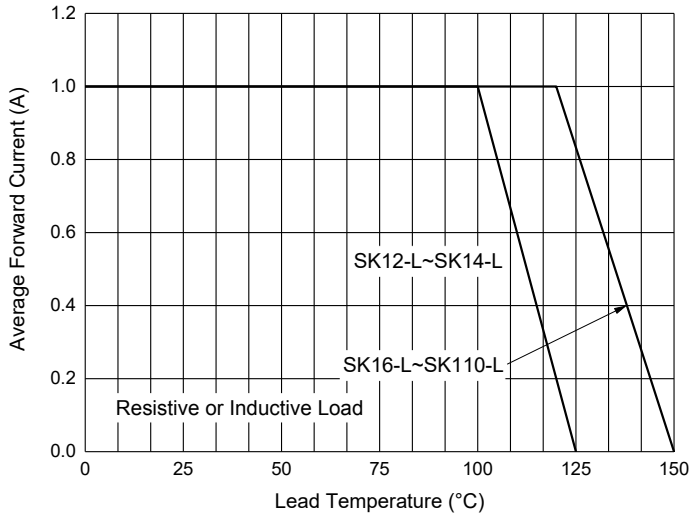


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

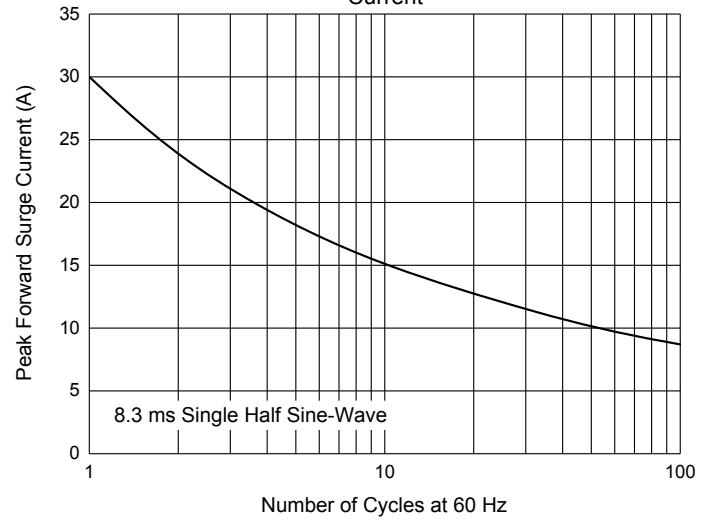


Fig. 3 - Typical Instantaneous Forward Characteristics

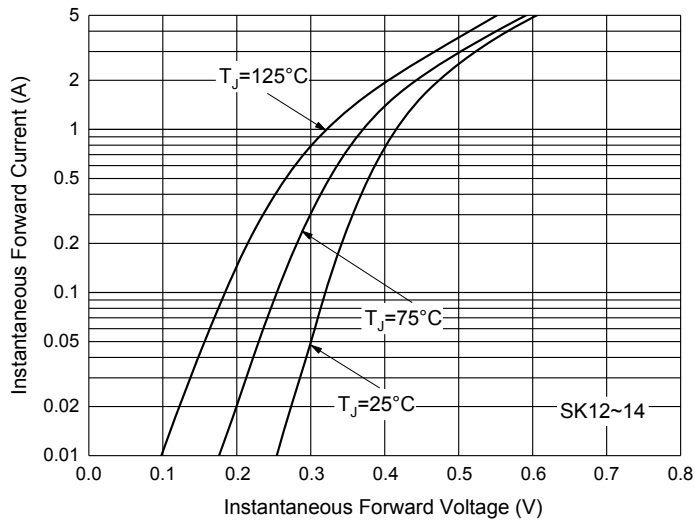


Fig. 4 - Typical Instantaneous Forward Characteristics

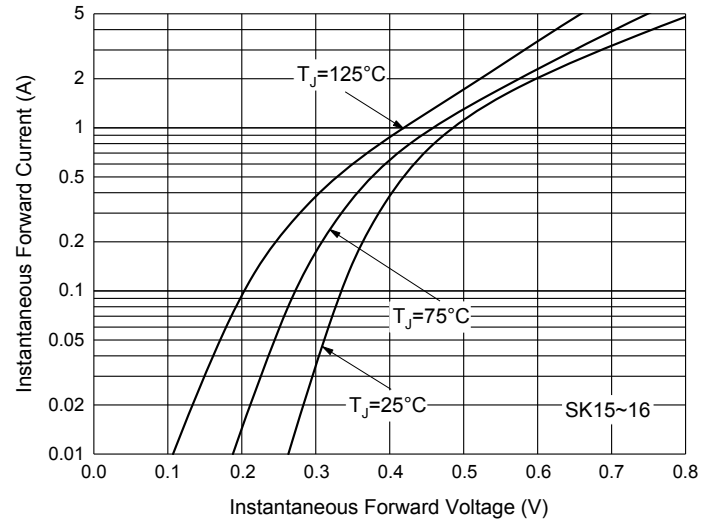


Fig. 5 - Typical Instantaneous Forward Characteristics

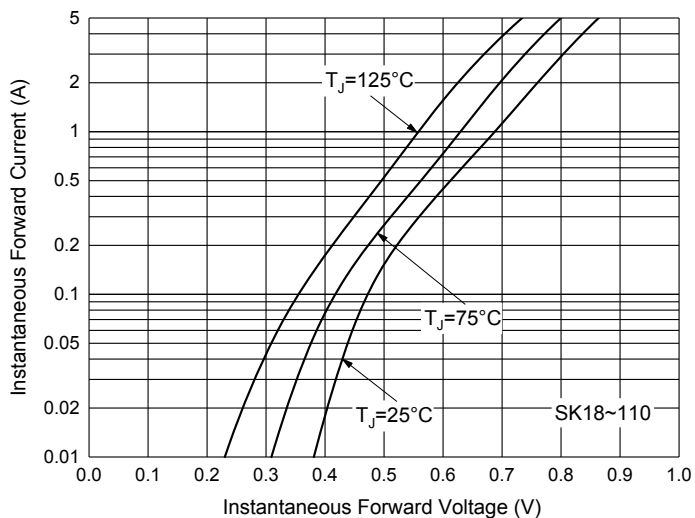
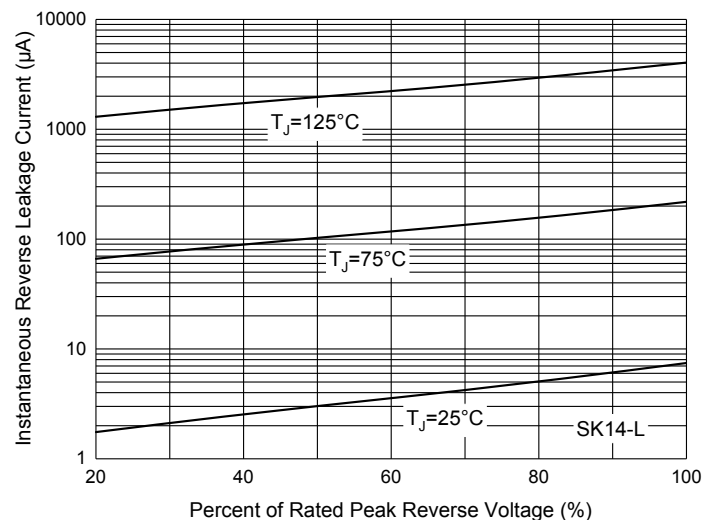


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

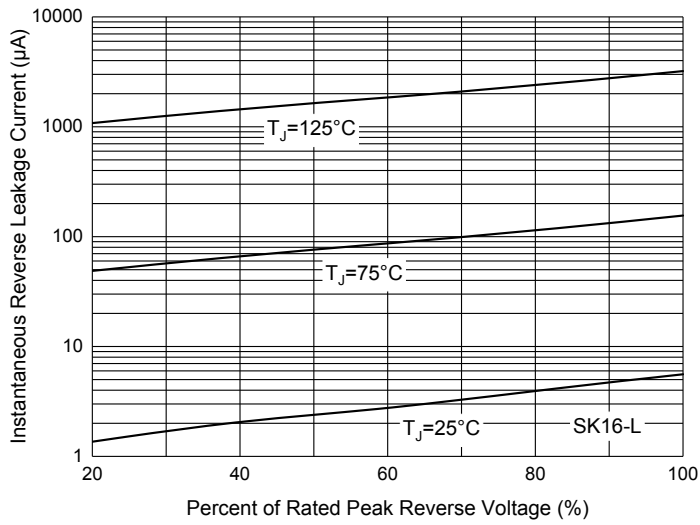
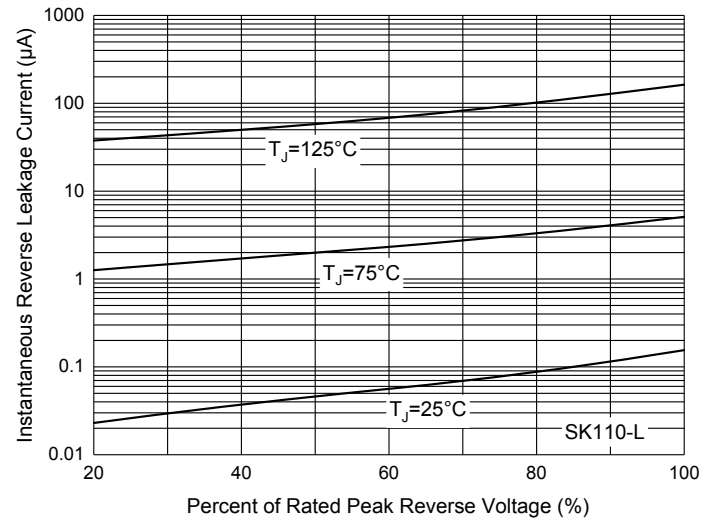


Fig. 8 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
SK12-LTP~SK110-LTP	Tape&Reel: 3Kpcs/Reel

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