

Features

- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to + 125°C(52AFL-510AFL)
- Operating Junction Temperature Range: -55°C to + 175°C(5150AFL-5200AFL)
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 6°C/W Junction to Case
- Typical Thermal Resistance: 18°C/W Junction to Lead
- Typical Thermal Resistance: 61°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK52AFL	SK52	20V	14V	20V
SK53AFL	SK53	30V	21V	30V
SK54AFL	SK54	40V	28V	40V
SK55AFL	SK55	50V	35V	50V
SK56AFL	SK56	60V	42V	60V
SK58AFL	SK58	80V	56V	80V
SK510AFL	SK510	100V	70V	100V
SK5150AFL	SK5150	150V	105V	150V
SK5200AFL	SK5200	200V	140V	200V

Electrical Characteristics @ 25°C Unless Otherwise Specified

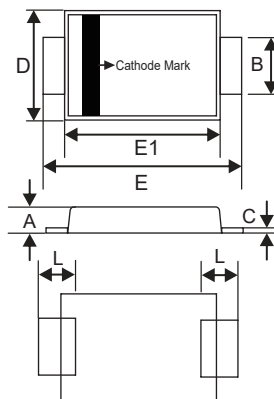
Average Forward Current	$I_{F(AV)}$	5.0A	See Fig.1
Peak Forward Surge Current	I_{FSM}	100A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	0.55V 0.70V 0.85V 0.87V 0.90V	$I_{FM}=5.0A;$ $T_J=25^\circ C$
SK52AFL-SK54AFL			
SK55AFL-SK56AFL			
SK58AFL-SK510AFL			
SK5150AFL SK5200AFL			
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1mA 10mA 0.01mA 1mA	$T_J=25^\circ C$ $T_J=100^\circ C$ $T_J=25^\circ C$ $T_J=100^\circ C$
SK52AFL-SK58AFL			
SK58AFL-SK5200AFL			
Typical Junction Capacitance	C_J	300pF 210pF 170pF 150pF 110pF	Measured at 1.0MHz, $V_R=4.0V$
SK52AFL-SK54AFL			
SK55AFL-SK56AFL			
SK58AFL-SK510AFL			
SK5150AFL SK5200AFL			

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 Exemption Applied, see EU Directive Annex 7a

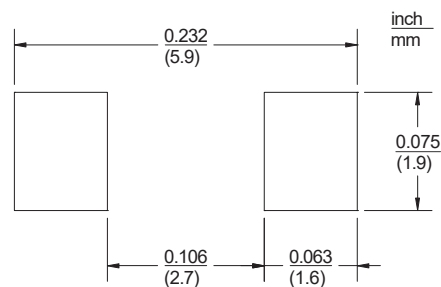
5 Amp Schottky Rectifiers 20 to 200 Volts

DO-221AC(SMA-FL)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	0.035	0.049	0.90	1.25	
B	0.049	0.065	1.25	1.65	
C	0.004	0.016	0.10	0.40	
D	0.089	0.116	2.25	2.95	
E	0.173	0.220	4.40	5.60	
E1	0.126	0.181	3.20	4.60	
L	0.020	0.059	0.50	1.50	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

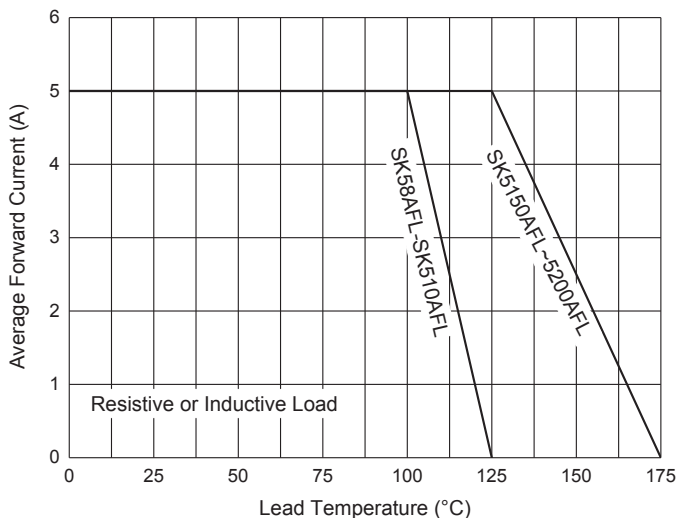


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

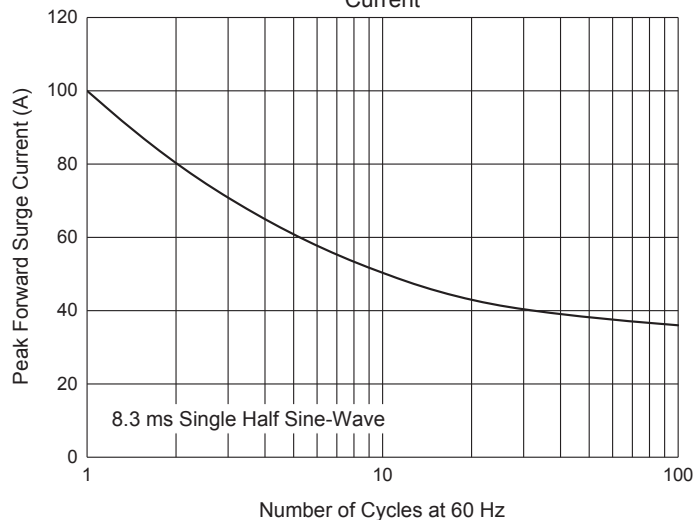


Fig. 3 - Typical Instantaneous Forward Characteristics

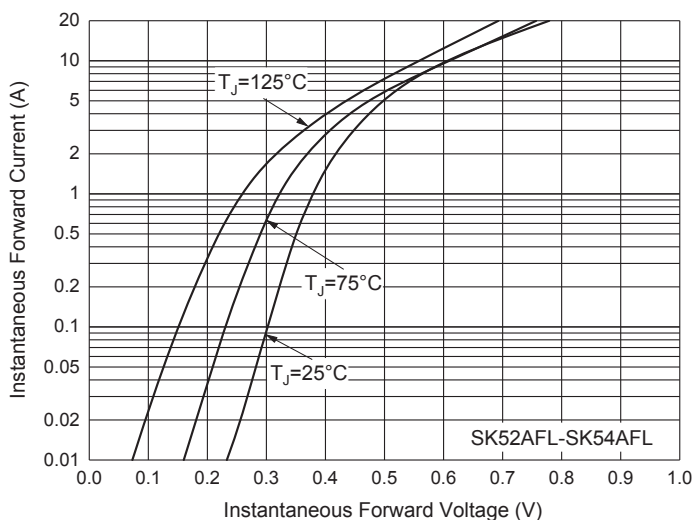


Fig. 4 - Typical Instantaneous Forward Characteristics

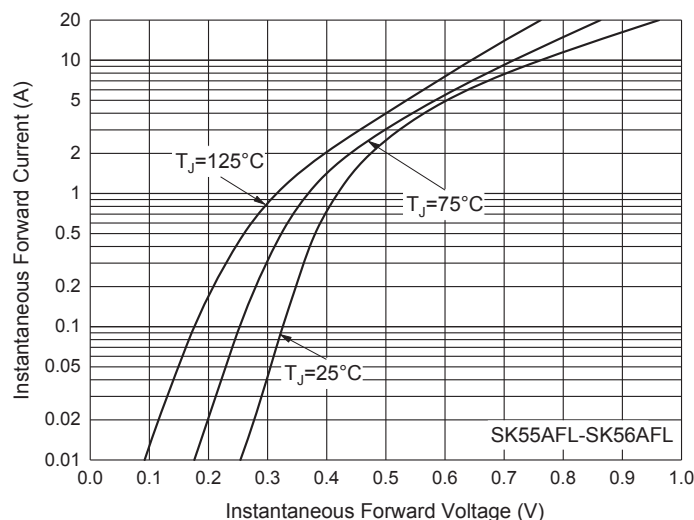


Fig. 5 - Typical Instantaneous Forward Characteristics

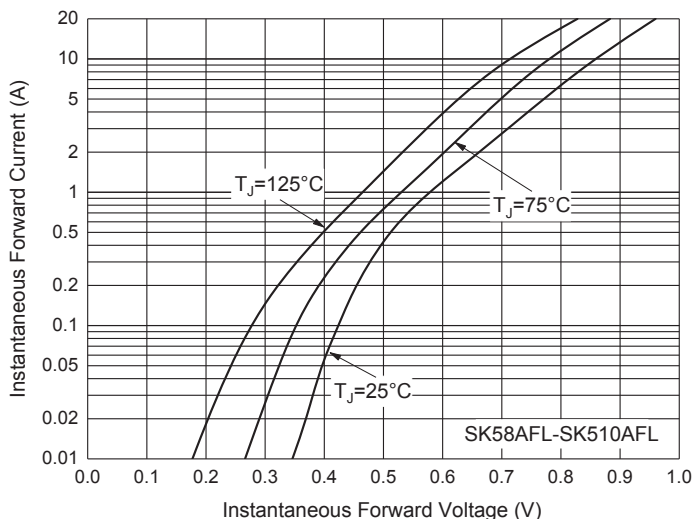
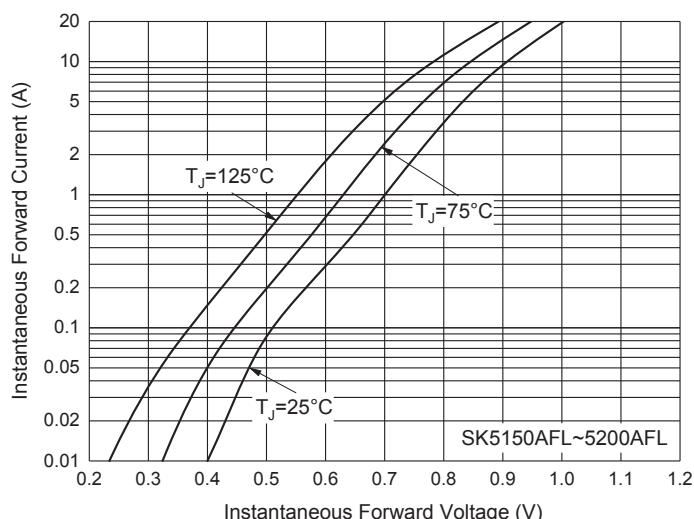


Fig. 6 - Typical Instantaneous Forward Characteristics



Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

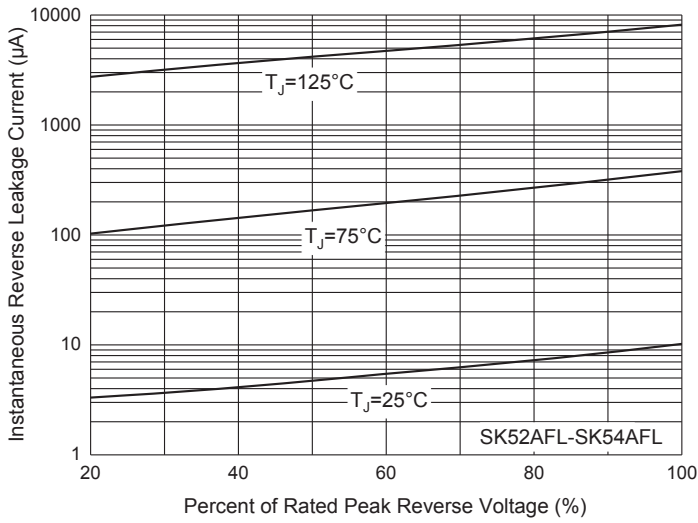


Fig. 8 - Typical Reverse Leakage Characteristics

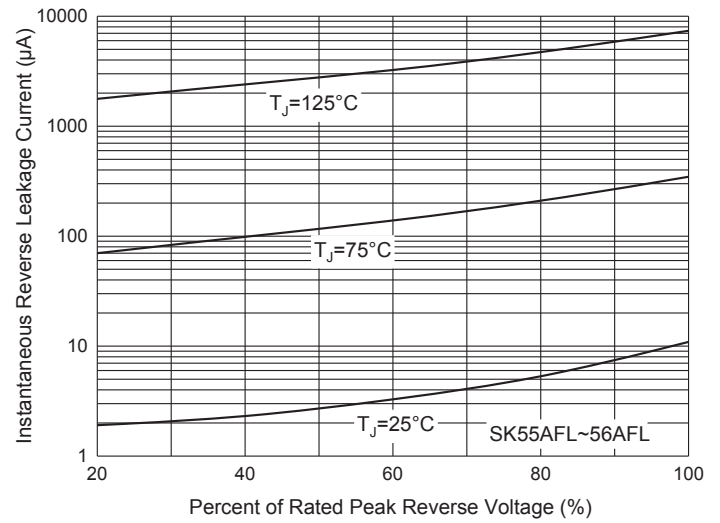


Fig. 9 - Typical Reverse Leakage Characteristics

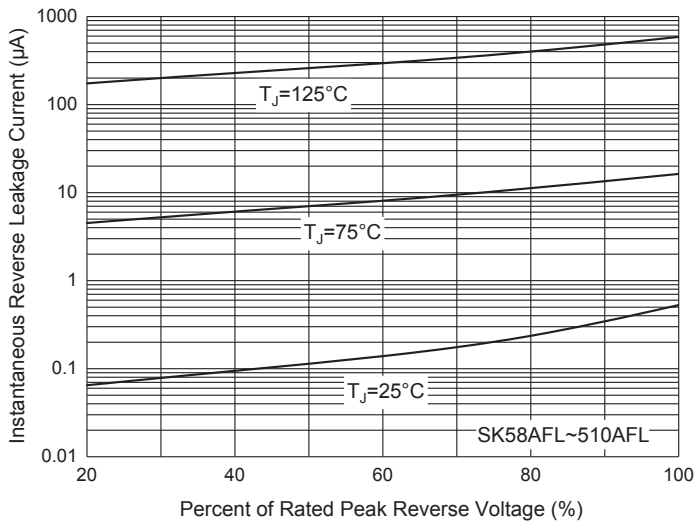


Fig. 10 - Typical Reverse Leakage Characteristics

