

Features

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

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C(SK32AFL-345AFL)
- Operating Junction Temperature Range: -55°C to +150°C(SK35AFL-310AFL)
- 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
SK32AFL	SK32A	20V	14V	20V
SK33AFL	SK33A	30V	21V	30V
SK34AFL	SK34A	40V	28V	40V
SK345AFL	SK345A	45V	31.5V	45V
SK35AFL	SK35A	50V	35V	50V
SK36AFL	SK36A	60V	42V	60V
SK38AFL	SK38A	80V	56V	80V
SK310AFL	SK310A	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

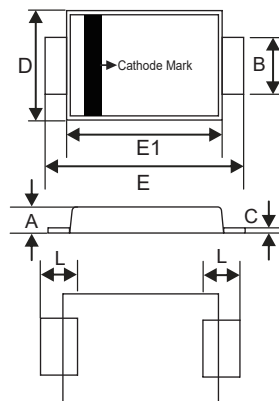
Average Forward Current	$I_{F(AV)}$	3.0A	See Fig.1
Peak Forward Surge Current	I_{FSM}	80A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage SK32AFL-345AFL SK35AFL-36AFL SK38AFL-310AFL	V_F	0.50V 0.75V 0.85V	$I_{FM}=3.0A$; $T_J=25^\circ C^*$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1mA 10mA	$T_J=25^\circ C$ $T_J=100^\circ C$
Typical Junction Capacitance SK32AFL-345AFL SK35AFL-36AFL SK38AFL-310AFL	C_J	180pF 150pF 110pF	Measured at 1.0MHz, $V_R=4.0V$

*Pulse test: Pulse width 200 μ sec, Duty cycle 2% 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

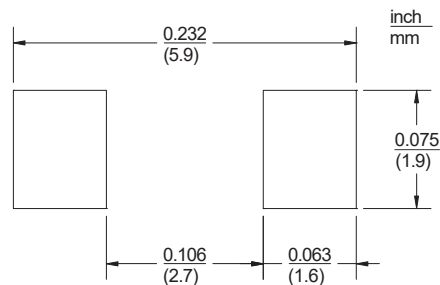
3 Amp Schottky Rectifier 20 to 100 Volts

DO-221AC(SMA-FL)



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
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

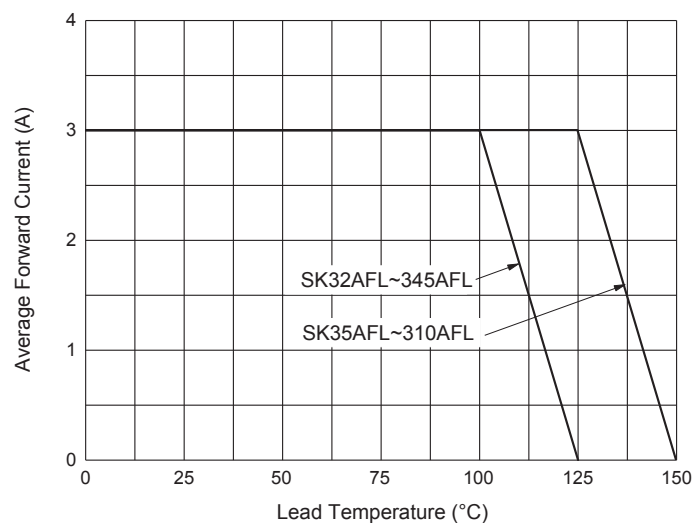


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

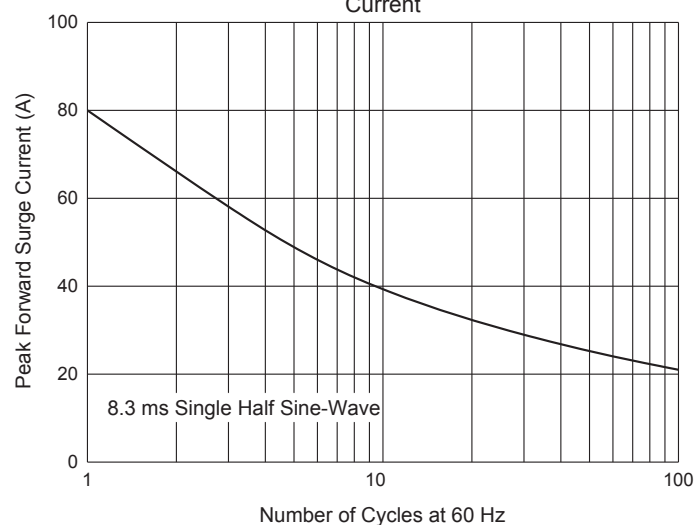


Fig. 3 - Typical Instantaneous Forward Characteristics

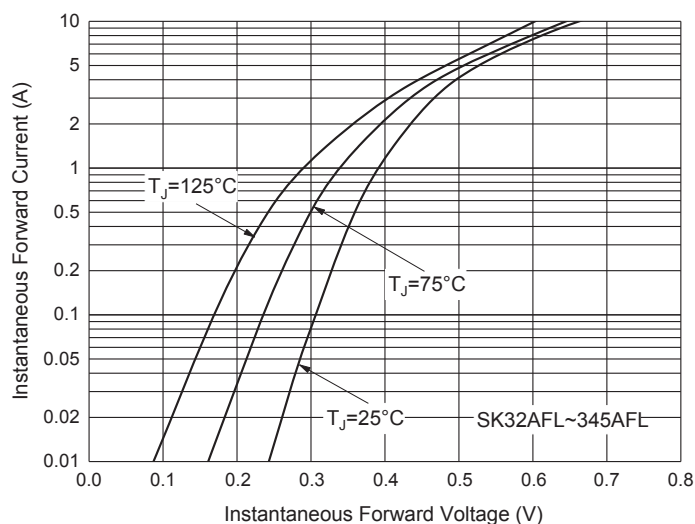


Fig. 4 - Typical Instantaneous Forward Characteristics

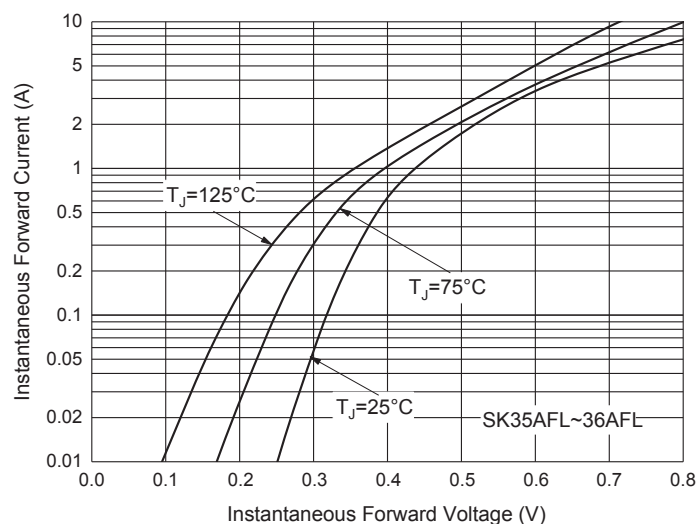


Fig. 5 - Typical Instantaneous Forward Characteristics

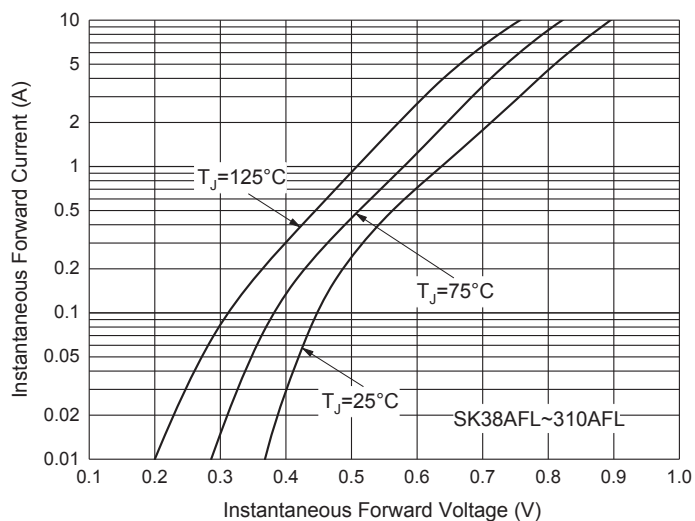
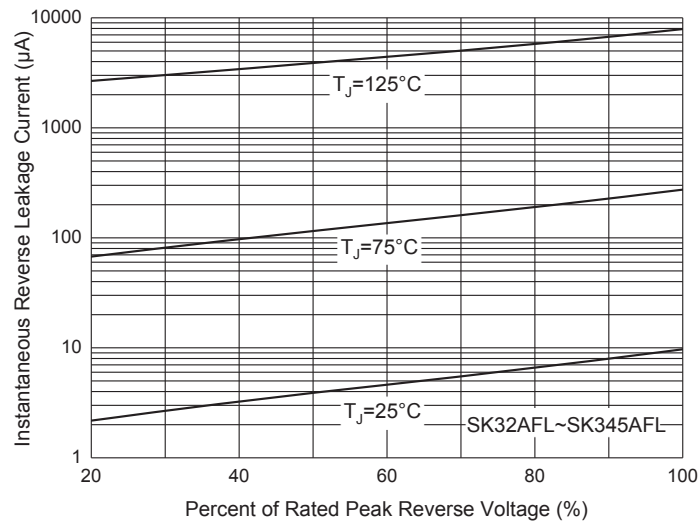


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

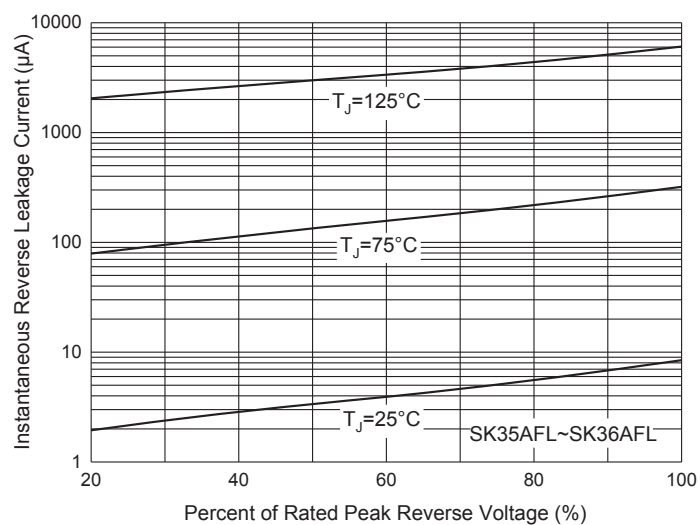
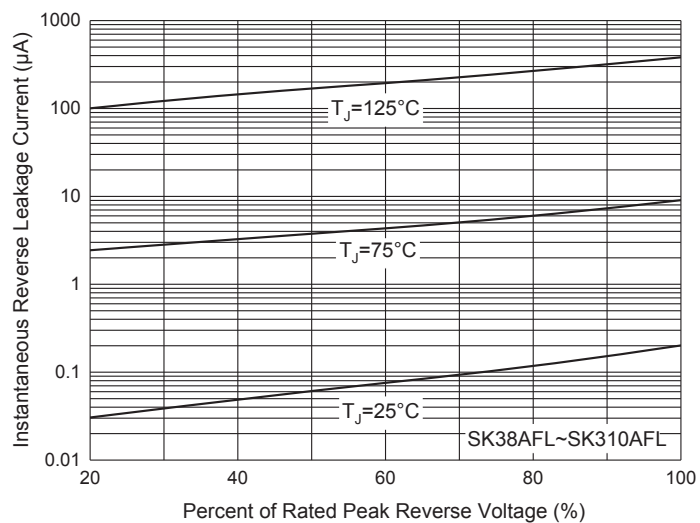


Fig. 8 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel

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