Features

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

3 Amp Schottky Rectifier 20 to 100 Volts

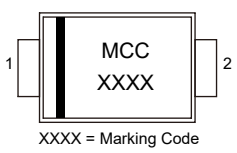
Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value								Unit
		SK32 AFL	SK33 AFL	SK34 AFL	SK345 AFL	SK35 AFL	SK36 AFL	SK38 AFL	SK310 AFL	
Peak Repetitive Reverse Voltage	V_{RRM}	20	30	40	45	50	60	80	100	V
Working Peak Reverse Voltage	V_{RWM}									
DC Blocking Voltage	V_R									
RMS Reverse Voltage	V_{RMS}	14	21	28	31.5	35	42	56	70	V
Average Rectified Forward Current	$I_{F(AV)}$	3								A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	80								A
Current Squared Time @1ms≤t≤8.3ms	I^2t	26.56								A^2s

Marking Code

Part Number	Marking Code
SK32AFL	SK32A
SK33AFL	SK33A
SK34AFL	SK34A
SK345AFL	SK345A
SK35AFL	SK35A
SK36AFL	SK36A
SK38AFL	SK38A
SK310AFL	SK310A

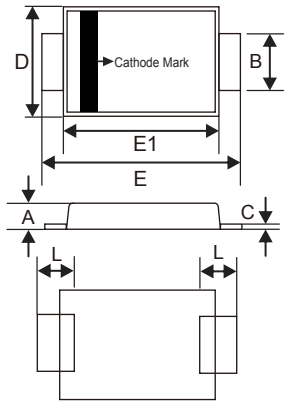
Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol
1	Cathode	 XXXX = Marking Code	
2	Anode		

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

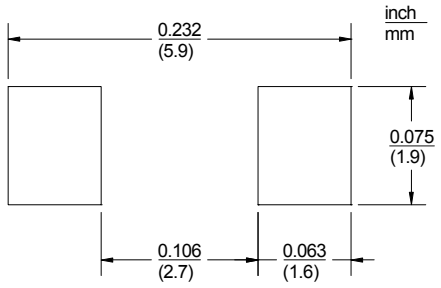
2. High temperature solder exemption applied, see EU directive annex 7a.

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



Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range	SK32AFL~SK345AFL	-55		125	°C
T_J	Operating Junction Temperature Range	SK35AFL~SK310AFL	-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$Rth_{(J-L)}$	Thermal Resistance from Junction to Lead	Note 1		18		°C/W
$Rth_{(J-A)}$	Thermal Resistance from Junction to Ambient	Note 1		70		°C/W

Note:
1.Mounted on P.C.B. with 8.0 mm x 8.0 mm copper pad areas.

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage SK32AFL~SK345AFL SK35AFL~SK36AFL SK38AFL~SK310AFL	V_F	I_F=3A;T_J=25°C			0.50 0.70 0.85	V
Reverse Current	I_R	at Rated V_R;T_J=25°C at Rated V_R;T_J=100°C			0.1 10	mA
Junction Capacitance SK32AFL~SK345AFL SK35AFL~SK36AFL SK38AFL~SK310AFL	C_J	V_R=4V;f=1MHz;T_J=25°C		150 130 95		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

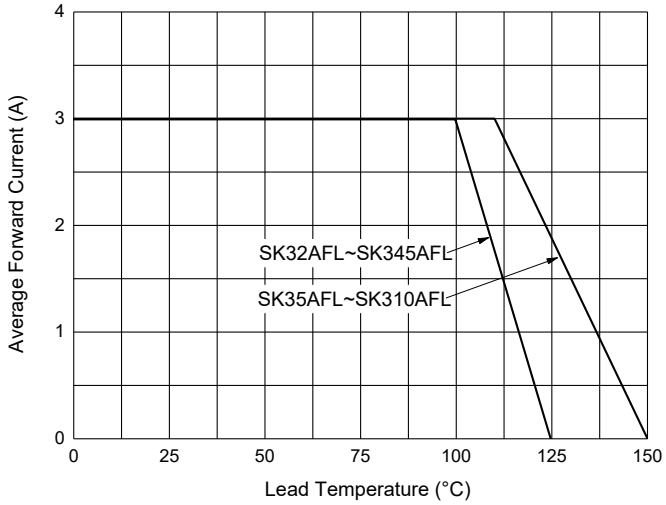


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

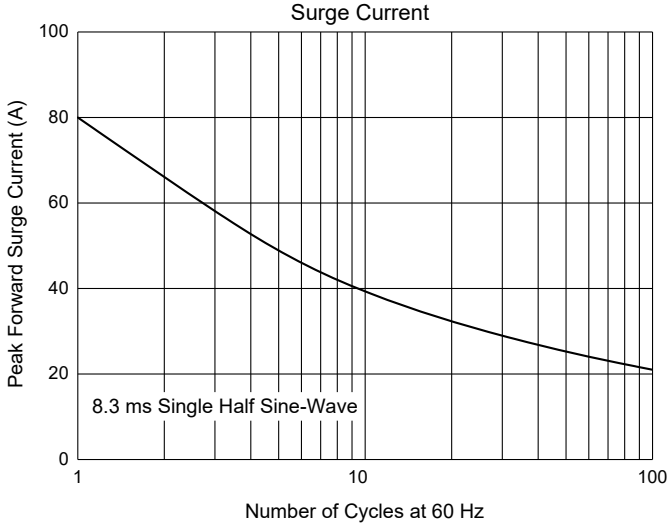


Fig. 3 - Typical Forward Characteristics

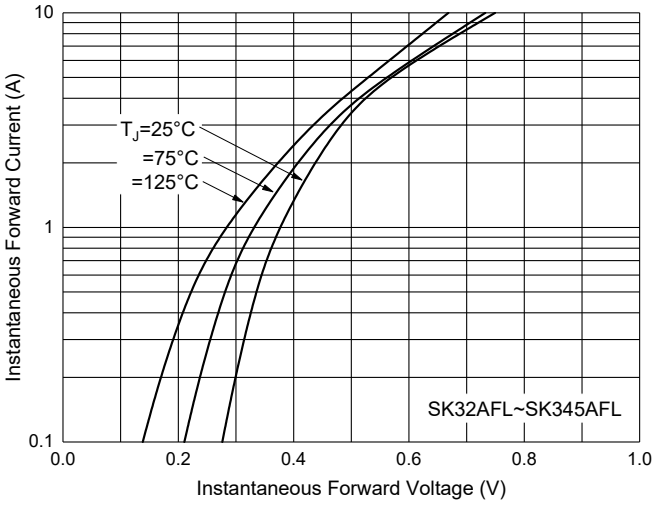


Fig. 4 - Typical Forward Characteristics

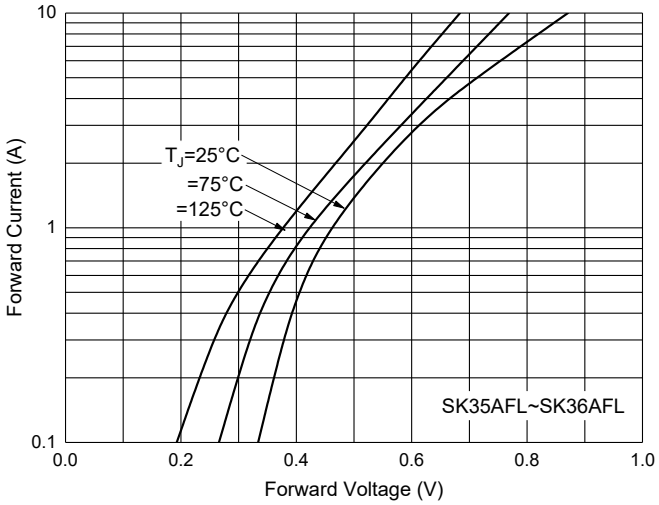


Fig. 5 - Typical Forward Characteristics

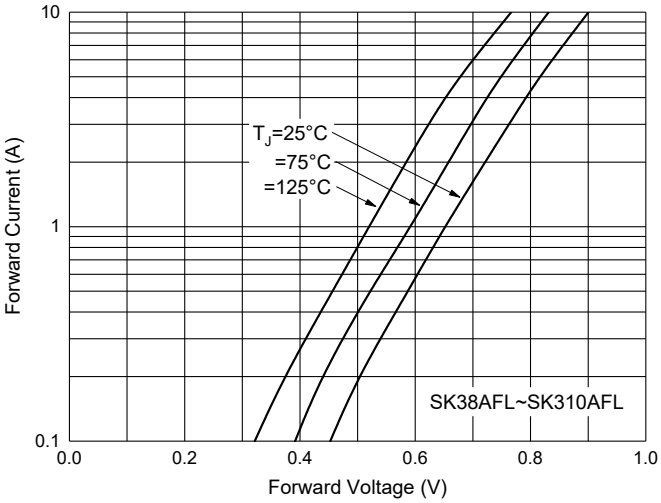
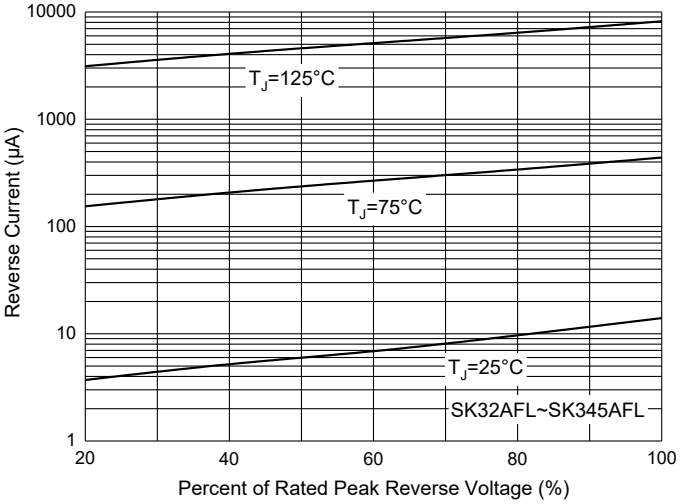


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

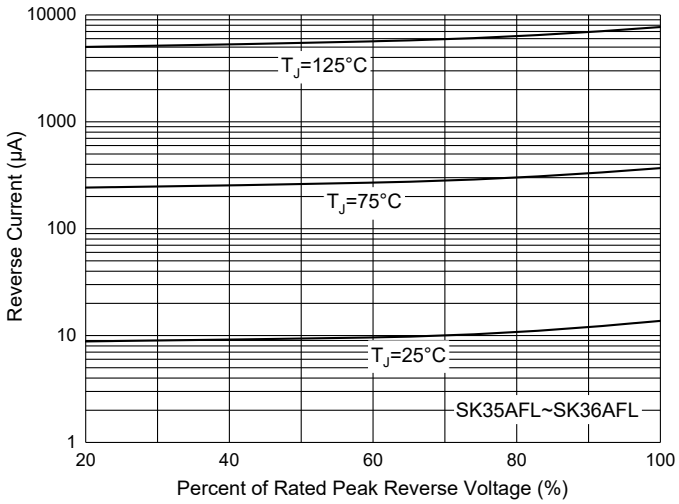


Fig. 8 - Typical Reverse Leakage Characteristics

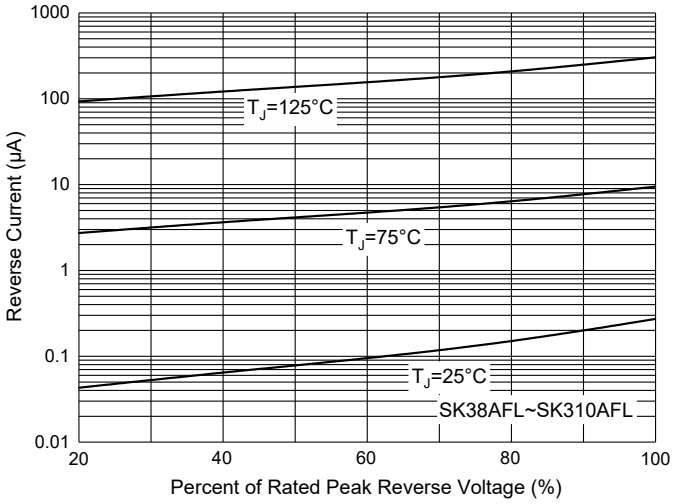
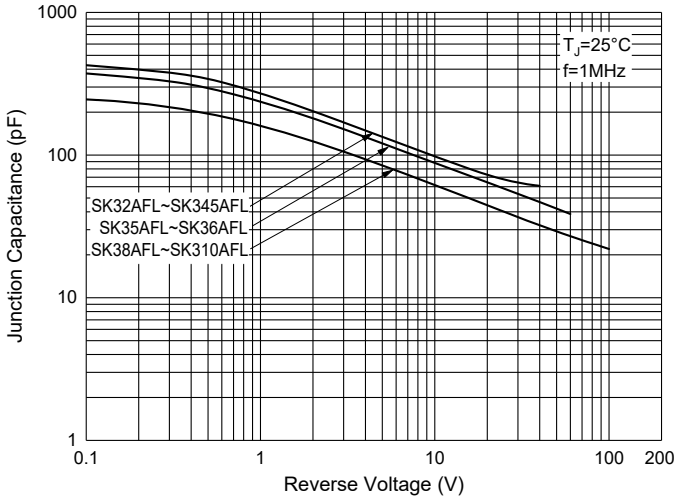


Fig. 9 - Typical Capacitance Characteristics



Ordering Information

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