

## 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 <sub>F(AV)</sub>	3.0A	See Fig.1
Peak Forward Surge Current	I <sub>FSM</sub>	80A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage SK32AFL-345AFL SK35AFL-36AFL SK38AFL-310AFL	V <sub>F</sub>	0.50V 0.75V 0.85V	I <sub>FM</sub> =3.0A; T <sub>J</sub> =25ºC*
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1mA 10mA	T <sub>J</sub> =25⁰C T <sub>J</sub> =100⁰C
Typical Junction Capacitance SK32AFL-345AFL SK35AFL-36AFL SK38AFL-310AFL	CJ	180pF 150pF 110pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

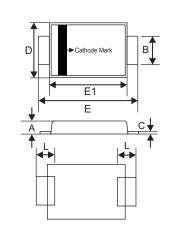
\*Pulse test: Pulse width 200  $\mu sec,$  Duty cycle 2% Note :

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

2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a

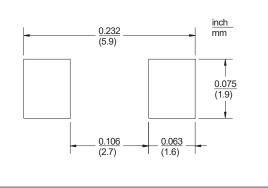
# 3 Amp Schottky Rectifier 20 to 100 Volts

## DO-221AC(SMA-FL)



	DIMENSIONS						
DIM	INCHES		MM		NOTE		
	MIN	MAX	MIN	MAX	NOTE		
A	0.035	0.049	0.90	1.25			
В	0.049	0.065	1.25	1.65			
С	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**

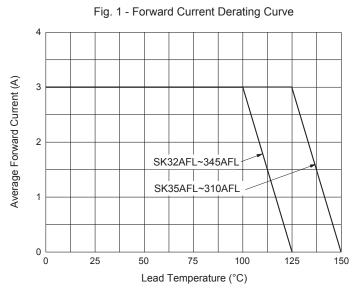


Fig. 3 - Typical Instantaneous Forward Characteristics

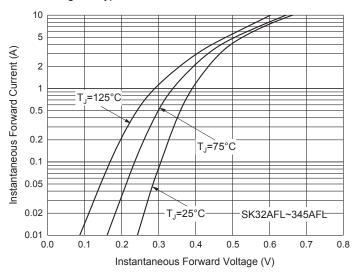
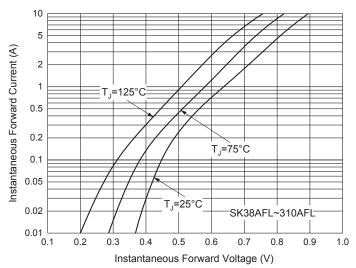


Fig. 5 - Typical Instantaneous Forward Characteristics



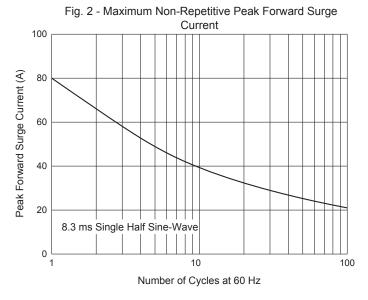


Fig. 4 - Typical Instantaneous Forward Characteristics

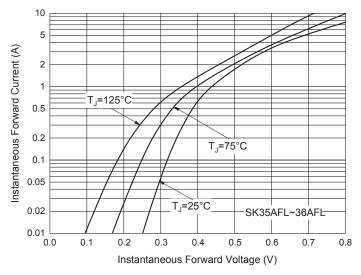
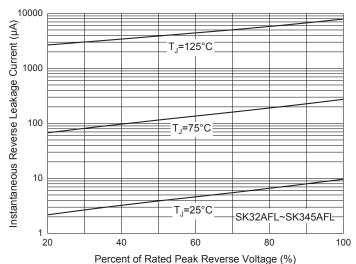


Fig. 6 - Typical Reverse Leakage Characteristics





SK38AFL~SK310AFL

100

80

## **Curve Characteristics**

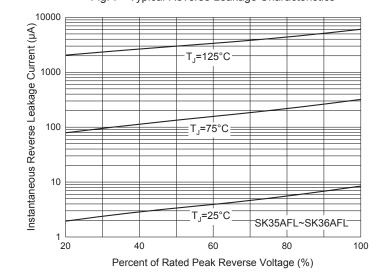


Fig. 7 - Typical Reverse Leakage Characteristics

1000 Instantaneous Reverse Leakage Current (µA) 100 \_T\_=125°C 10 TJ=75°C 1 0.1 T<sub>J</sub>=25°C

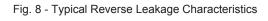
60

Percent of Rated Peak Reverse Voltage (%)

0.01

20

40





## **Ordering Information**

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

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