Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- 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

5 Amp Schottky Rectifiers 20 to 200 Volts

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

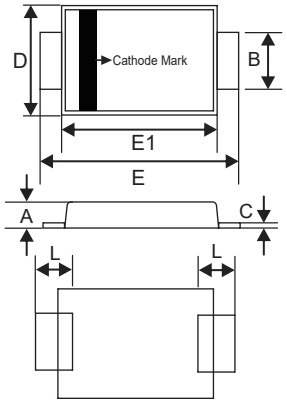
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SK52AFL	SK52	20V	14V	20V
SK53AFL	SK53	30V	21V	30V
SK54AFL	SK54	40V	28V	40V
SK55AFL	SK55	50V	35V	50V
SK56AFL	SK56	60V	42V	60V
SK58AFL	SK58	80V	56V	80V
SK510AFL	SK510	100V	70V	100V
SK5150AFL	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 SK52AFL-SK54AFL SK55AFL-SK56AFL SK58AFL-SK510AFL SK5150AFL SK5200AFL	V_F	0.55V 0.70V 0.85V 0.87V 0.90V	I_{FM}=5.0A; T_J=25ºC
Maximum DC Reverse Current at Rated DC Blocking Voltage SK52AFL-SK58AFL SK58AFL-SK5200AFL	I_R	0.1mA 10mA 0.01mA 1mA	T_J=25ºC T_J=100ºC T_J=25ºC T_J=100ºC
Typical Junction Capacitance SK52AFL-SK54AFL SK55AFL-SK56AFL SK58AFL-SK510AFL SK5150AFL SK5200AFL	C_J	300pF 210pF 170pF 150pF 110pF	Measured at 1.0MHz, V_R=4.0V

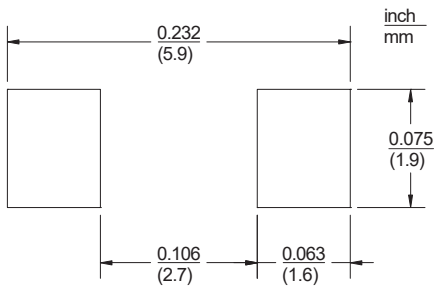
Note :1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a

DO-221AC(SMA-FL)



DIM	INCHES MIN	INCHES MAX	MM MIN	MM MAX	NOTE
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

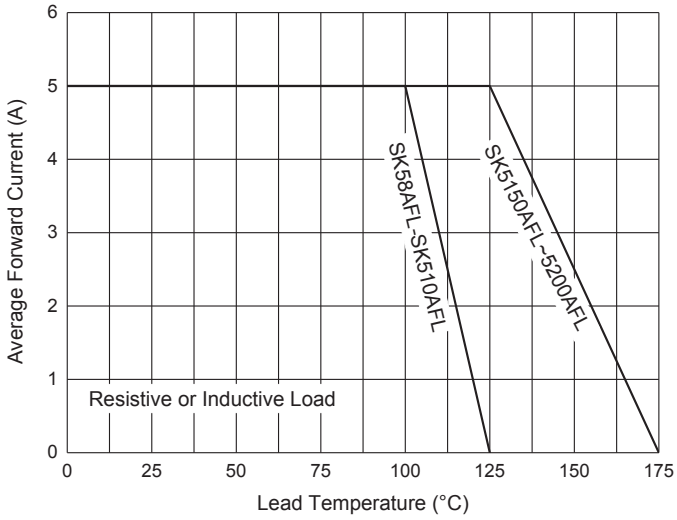


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

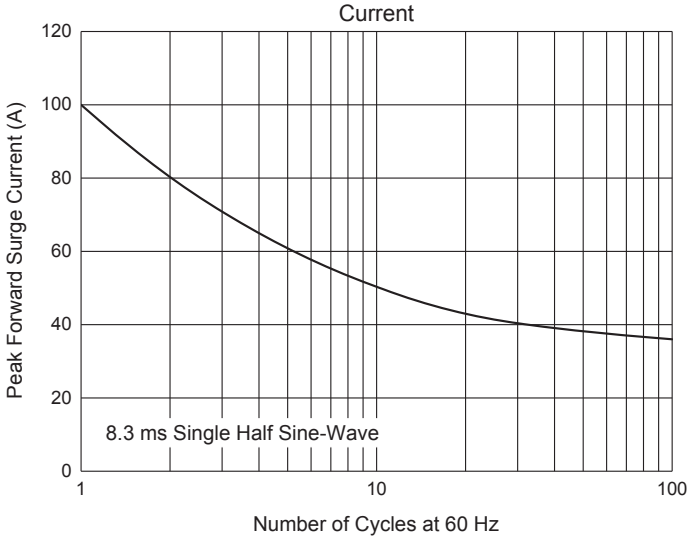


Fig. 3 - Typical Instantaneous Forward Characteristics

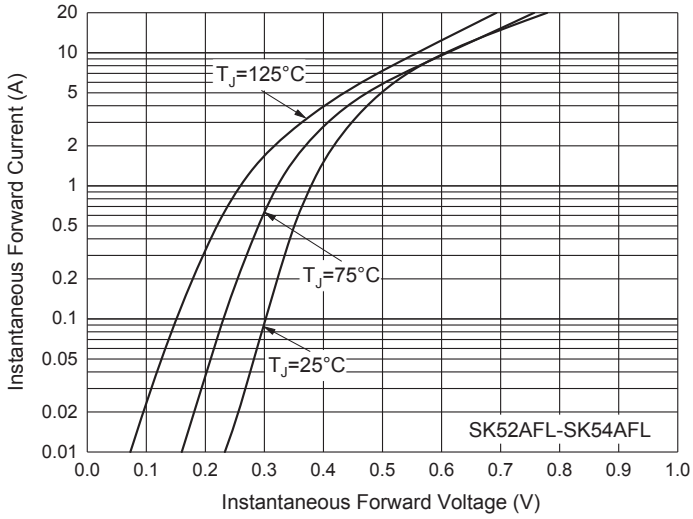


Fig. 4 - Typical Instantaneous Forward Characteristics

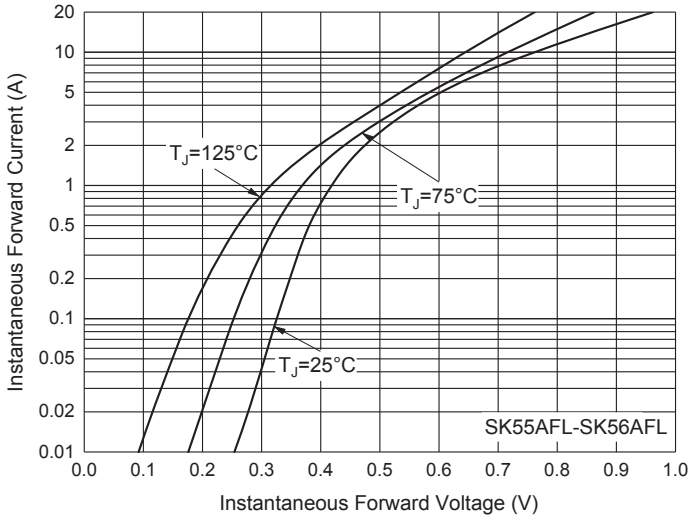


Fig. 5 - Typical Instantaneous Forward Characteristics

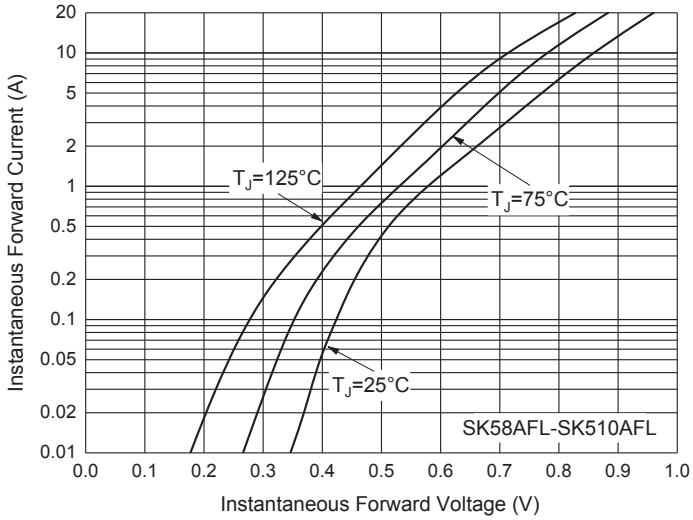
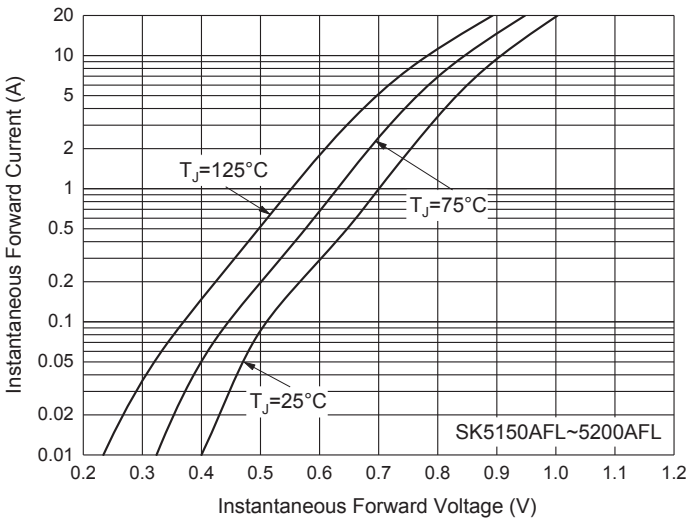


Fig. 6 - Typical Instantaneous Forward Characteristics



Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

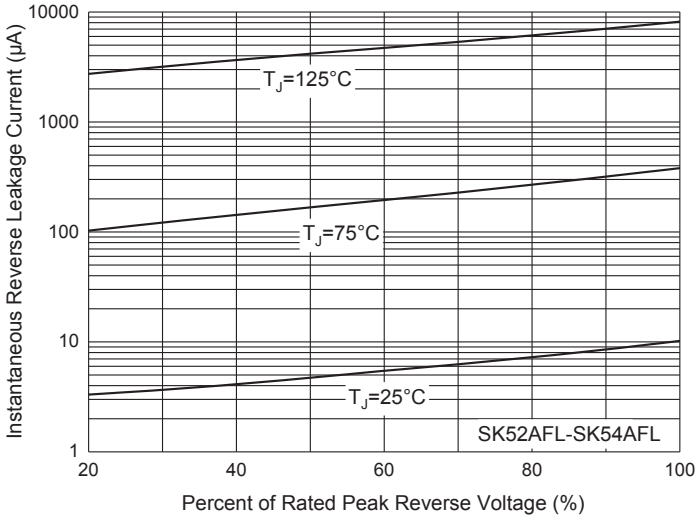


Fig. 8 - Typical Reverse Leakage Characteristics

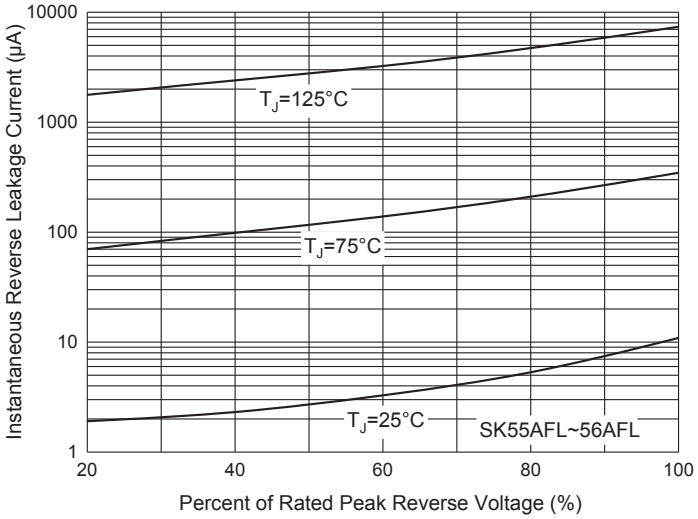


Fig. 9 - Typical Reverse Leakage Characteristics

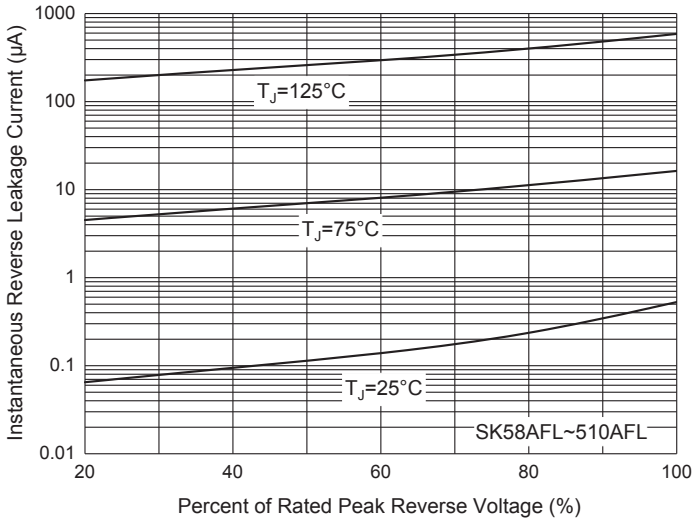
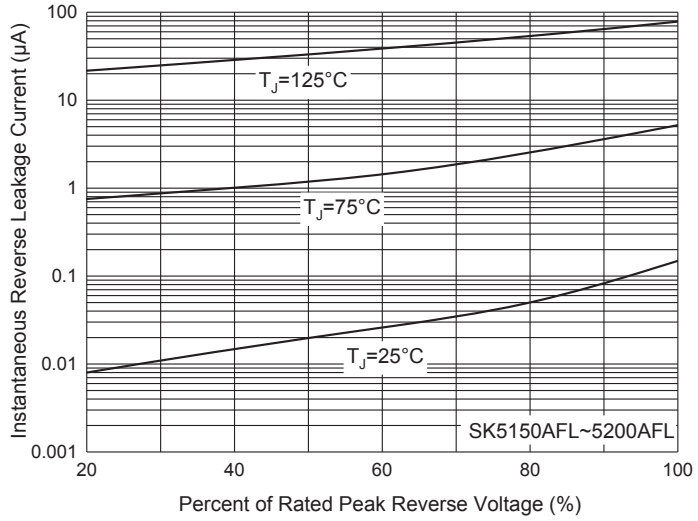


Fig. 10 - Typical Reverse Leakage Characteristics



Ordering Information

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

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

*****IMPORTANT NOTICE*****

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . ***Micro Commercial Components Corp*** . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold ***Micro Commercial Components Corp*** . and all the companies whose products are represented on our website, harmless against all damages.

*****LIFE SUPPORT*****

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

*****CUSTOMER AWARENESS*****

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources**. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.