1 Amp Ultra Fast Recovery Silicon Rectifier 50 to 1000 Volts

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Ultra Fast Recovery
- High Reliability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -65ºC to +150ºC
- Storage Temperature Range: -65ºC to +150ºC
- Thermal Resistance: 80°C/W Junction to Ambient

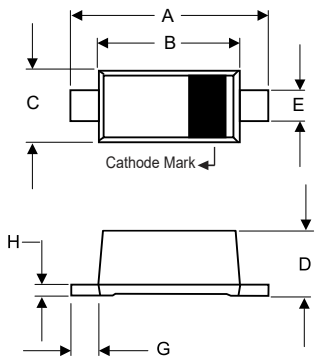
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
UFM11PL	U1	50V	35V	50V
UFM12PL	U2	100V	70V	100V
UFM13PL	U3	200V	140V	200V
UFM14PL	U4	400V	280V	400V
UFM15PL	U5	600V	420V	600V
UFM16PL	U6	800V	560V	800V
UFM17PL	U7	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	T_L=90ºC
Peak Forward Surge Current	I_{FSM}	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage UFM11PL-UFM13PL UFM14PL UFM15PL-UFM17PL	V_F	1.0V 1.4V 1.7V	I_{FM}=1.0A; T_A=25ºC
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	10μA 50μA	T_A=25ºC; T_A=125ºC
Maximum Reverse Recovery Time UFM11PL-UFM13PL UFM14PL UFM15PL-UFM17PL	T_{RR}	35ns 50ns 75ns	I_F=0.5A; I_R=1.0A; Irr=0.25A
Typical Junction Capacitance	C_J	20pF	Measured at 1.0MHz, V_R=4.0V

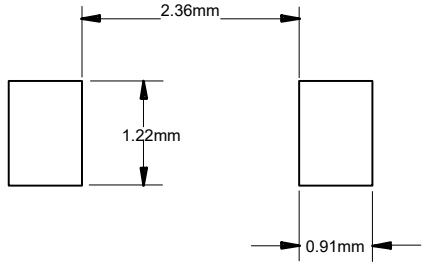
Note :1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

SOD-123FL



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.130	0.152	3.30	3.85	
B	0.100	0.122	2.55	3.10	
C	0.055	0.075	1.40	1.90	
D	0.035	0.053	0.90	1.35	
E	0.020	0.041	0.50	1.05	
G	0.010	----	0.25	----	
H	----	0.010	----	0.25	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

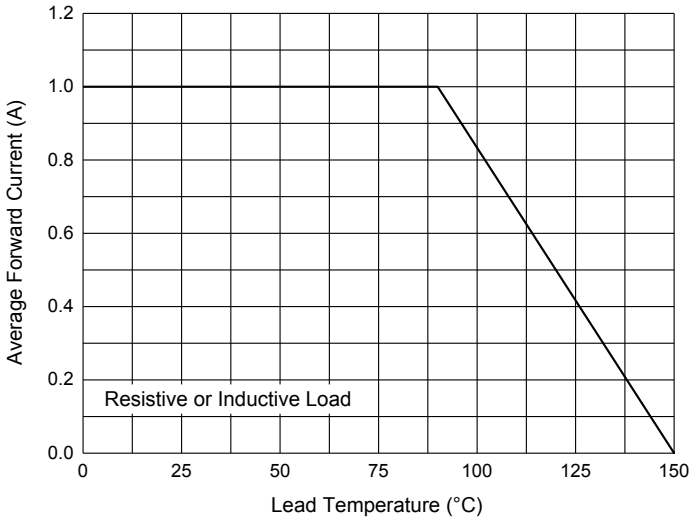


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

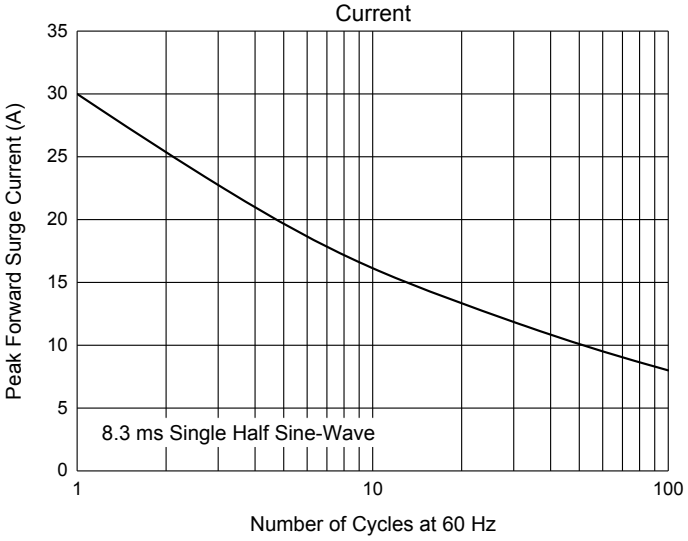


Fig. 3 - Typical Instantaneous Forward Characteristics

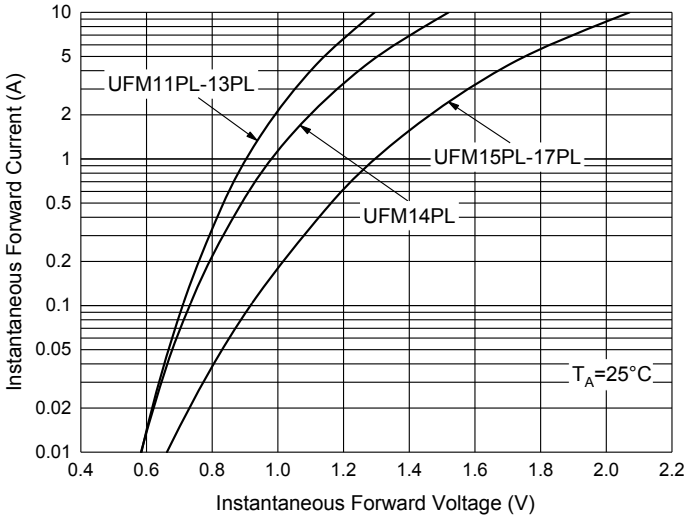
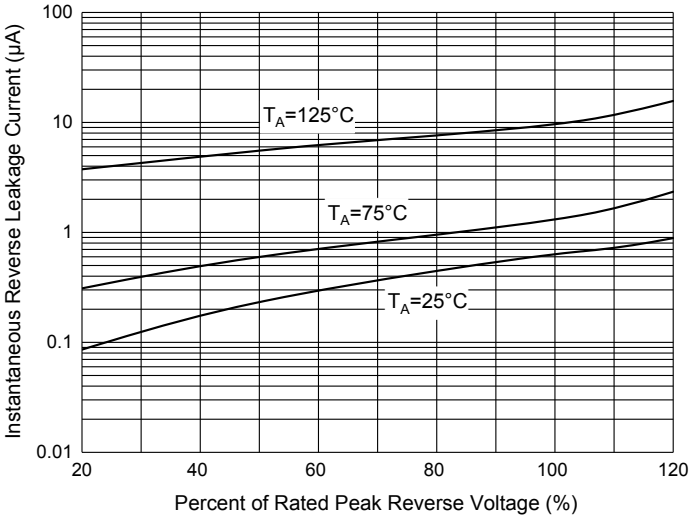


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel

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

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