

**Features**

- Halogen Free. "Green" Device (Note 1)
- Ultra Fast Recovery
- High Reliability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant(Note 2) ("P" Suffix Designates Compliant. See Ordering Information)

**Maximum Ratings**

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- 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**

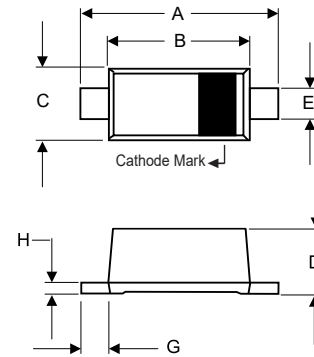
Average Forward Current	$I_{F(AV)}$	1.0A	$T_L=90^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage UFM11PL-UFM13PL UFM14PL UFM15PL-UFM17PL	$V_F$	1.0V 1.4V 1.7V	$I_{FM}=1.0A;$ $T_A=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking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

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.

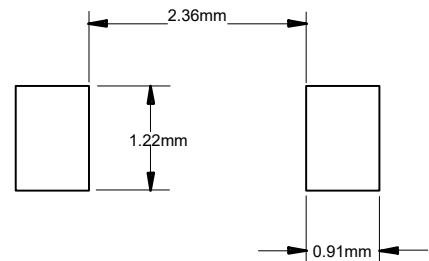
**1 Amp Ultra Fast Recovery Silicon Rectifier 50 to 1000 Volts**

**SOD-123FL**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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

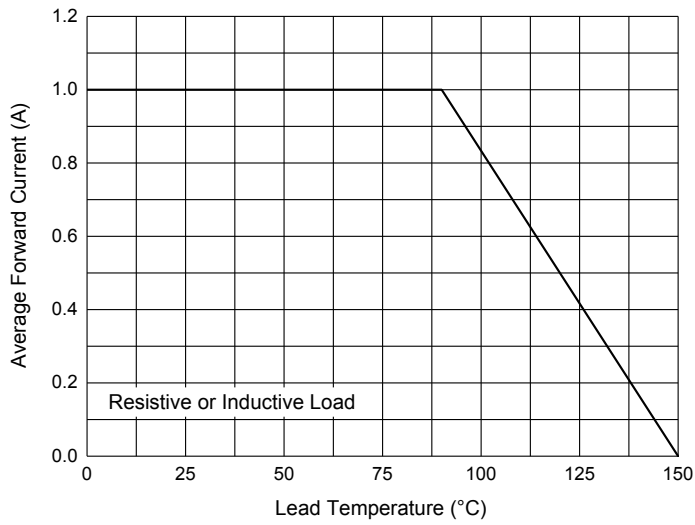


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

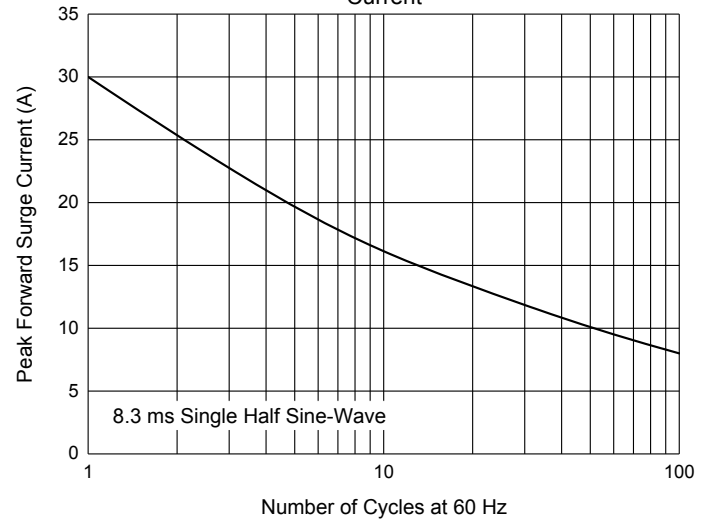


Fig. 3 - Typical Instantaneous Forward Characteristics

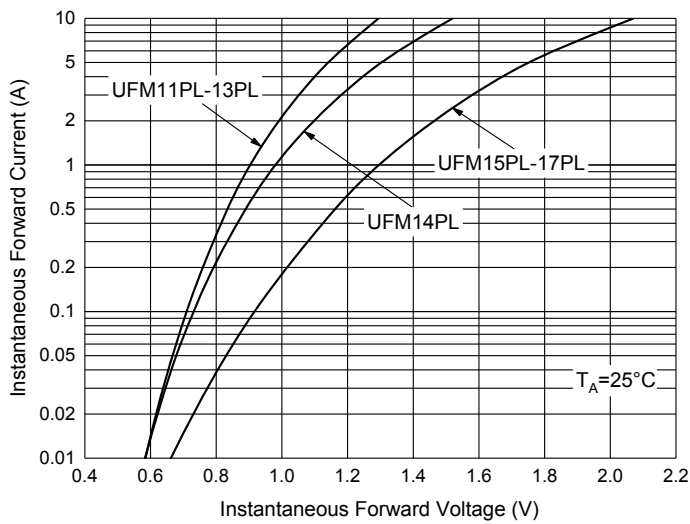
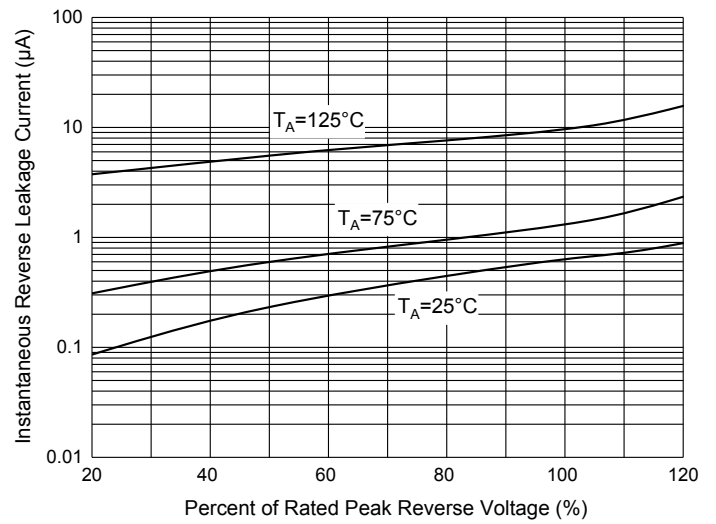


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

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

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