Features

- For Surface Mount Application
- Fast Recovery Time For High Efficiency
- Glass Passivated Junction
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant(Note 1)("P" Suffix Designates Compliant. See Ordering Information)

1.0 Amp Fast Recovery Rectifier 50 to 1000 Volts

Maximum Ratings

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Maximum Thermal Resistance: 75°C/W Junction to Ambient(Note 2)

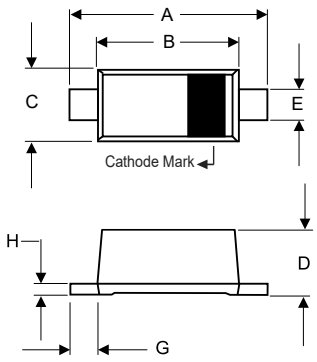
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
FSM11PL	F1	50V	35V	50V
FSM12PL	F2	100V	70V	100V
FSM13PL	F3	200V	140V	200V
FSM14PL	F4	400V	280V	400V
FSM15PL	F5	600V	420V	600V
FSM16PL	F6	800V	560V	800V
FSM17PL	F7	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	1.0A	T_L=110ºC
Peak Forward Surge Current	I_{FSM}	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.30V	I_{FM}=1.0A; T_J=25ºC
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1.0μA 100μA	T_J=25ºC; T_J=125ºC
Maximum Reverse Recovery Time FSM11PL~FSM14PL FSM15PL FSM16PL~FSM17PL	t_{rr}	 150ns 250ns 500ns	I_F=0.5A; I_R=1.0A; Irr=0.25A
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz V_R=4.0V

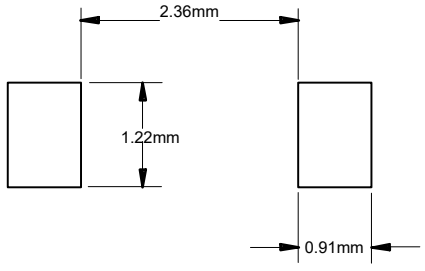
Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.
2. 6.0mm² Copper Pads To Each Terminal

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

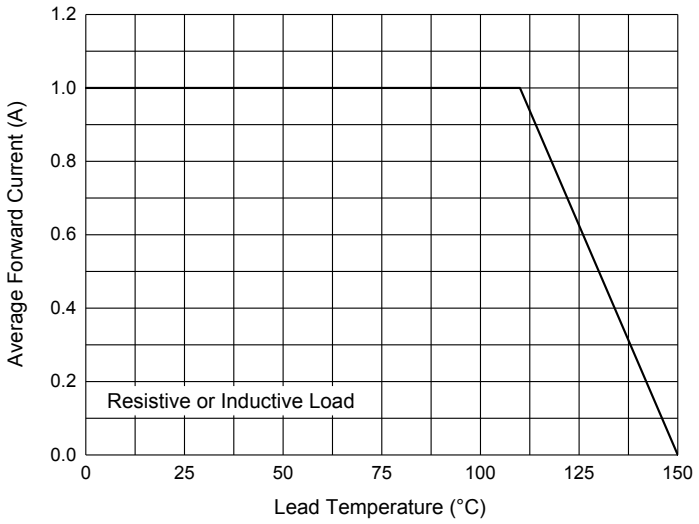


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

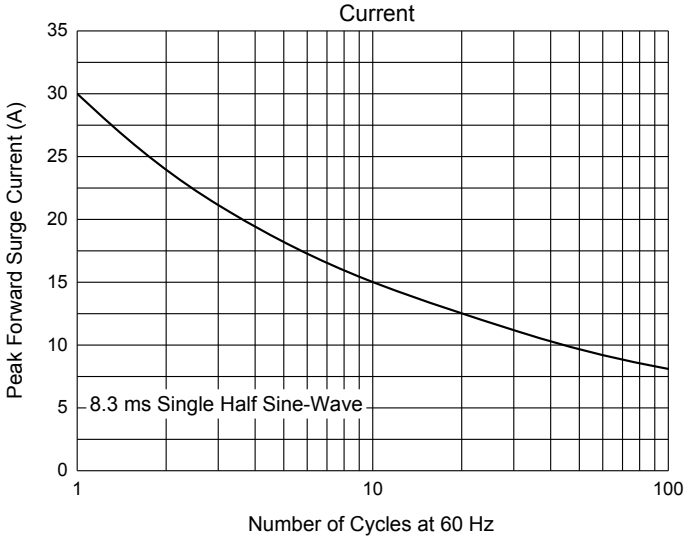


Fig. 3 - Typical Instantaneous Forward Characteristics

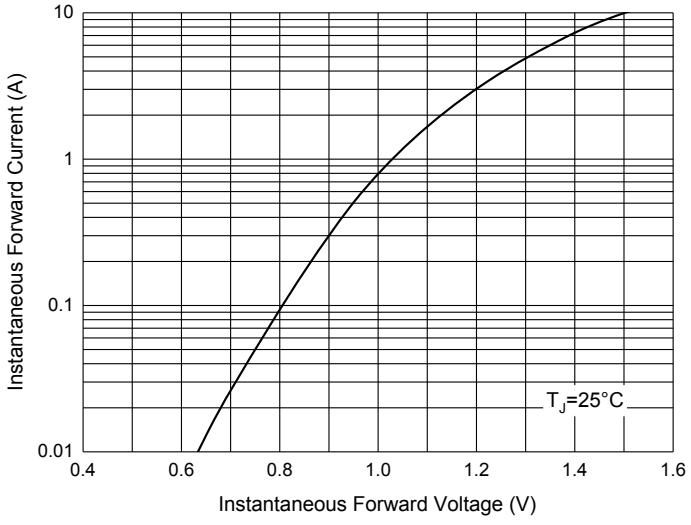
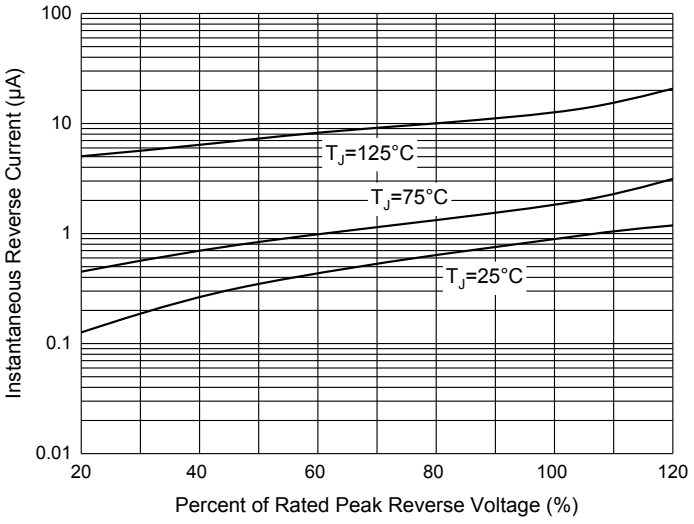


Fig. 4 - Typical Reverse Characteristics



Ordering Information

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

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