

Features

- 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
- Halogen Free. "Green" Device (Note 2)
- AEC-Q101 Qualified

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance(Note 3): 35°C/W Junction to Lead
- Typical Thermal Resistance(Note 3): 85°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SFM14PLHE3	S4	200V	140V	200V
SFM16PLHE3	S6	400V	280V	400V
SFM18PLHE3	S8	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

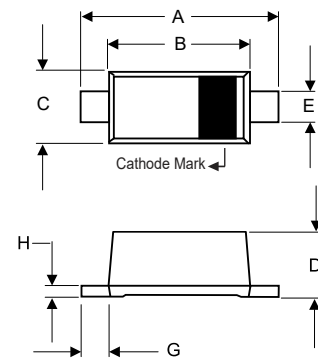
Average Forward Current	$I_{F(AV)}$	1.0A	$T_L=90^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	SFM14PLHE3 SFM16PLHE3 SFM18PLHE3	$I_{FM}=1.0A; T_J=25^\circ\text{C};$
		1.0V	
		1.3V 1.7V	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 100 μA	$T_J=25^\circ\text{C};$ $T_J=125^\circ\text{C}$
Maximum Reverse Recovery Time	t_{rr}	35ns	$I_F=0.5A; I_R=1.0A;$ $I_{rr}=0.25A$
Typical Junction Capacitance	C_J	SFM14PLHE3	Measured at 1.0MHz $V_R=4.0V$
		SFM16PLHE3~SFM18PLHE3	

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

2. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
3. Mounted on P.C.B with 3mm*3mm copper pad areas.

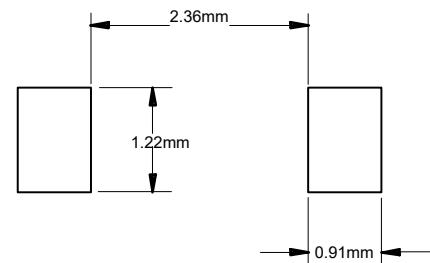
1 Amp Super Fast Recovery Rectifier 200 to 600 Volts

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

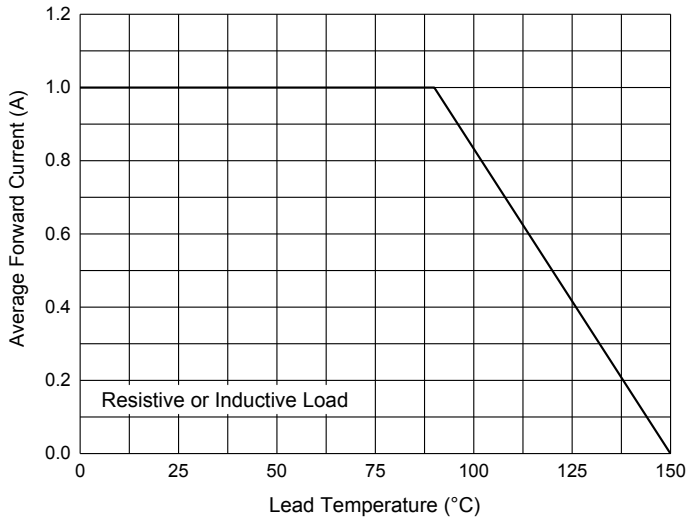


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

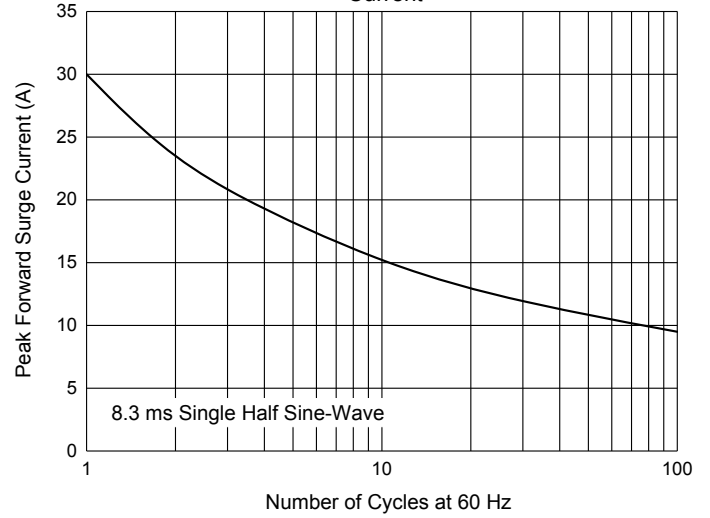


Fig. 3 - Typical Instantaneous Forward Characteristics

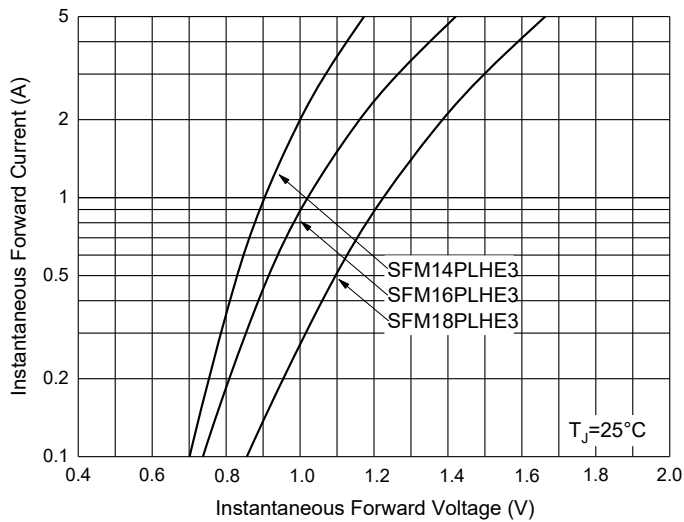
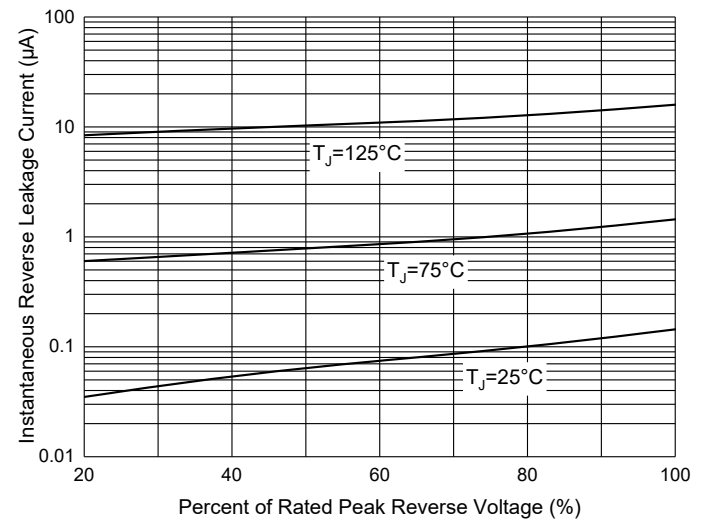


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

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

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