

Features

- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant (Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- High Surge Capability
- Low Forward Voltage
- Low Profile Package
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance (Note 3): 60°C/W Junction to Ambient
- Typical Thermal Resistance (Note 3): 30°C/W Junction to Case
- Typical Thermal Resistance (Note 3): 21°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SMD210HPL	M10H	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

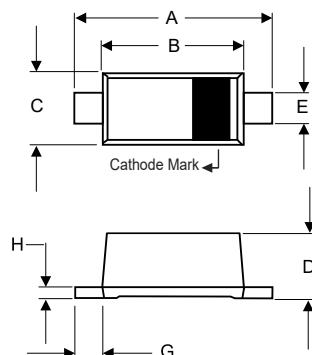
Average Forward Current	$I_{F(AV)}$	2.0A	$T_L=90^\circ\text{C}$
Surge Forward Current	I_{FSM}	50A	8.3ms, Half Sine
Power Dissipation	P_D	1.68W	
Forward Voltage	V_F	0.85V (Max)	$I_{FM}=2.0\text{A}; T_J=25^\circ\text{C}$
Maximum DC Reverse Current	I_R	1.0 μA (Typ) 5.0 μA (Max)	$T_J=25^\circ\text{C}$
Typical Junction Capacitance	C_J	210pF (Typ)	$f=1.0\text{MHz}, V_r=4\text{V}$

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 Notes 7a.
3. Thermal Resistance: PC Board Mounted on 0.2" x 0.2" (5mm x 5mm) copper pad area.

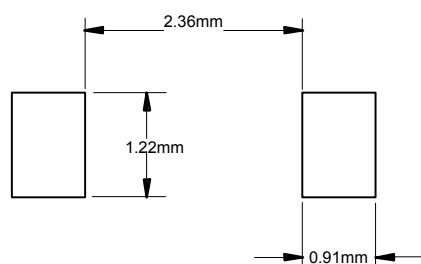
2 Amp Schottky Rectifier 100 Volts

SOD-123FL



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

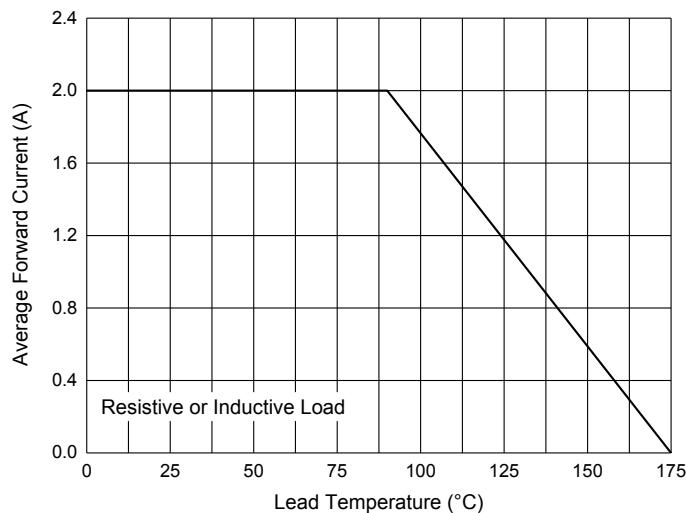


Fig. 3 - Typical Instantaneous Forward Characteristics

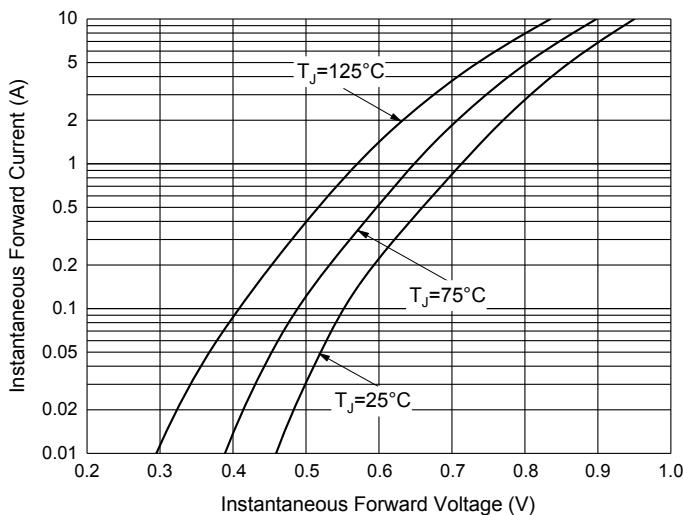


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

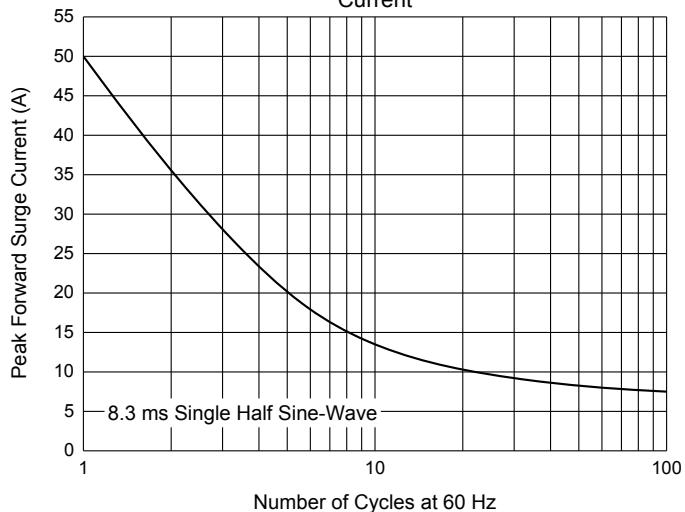
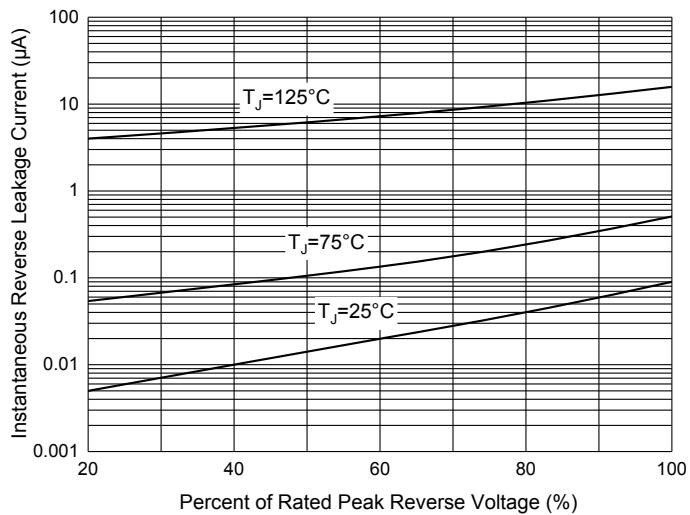


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

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

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