

Features

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

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 28°C/W Junction to Lead
- Maximum Thermal Resistance: 100°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SMD15PL	D5	50V	35V	50V
SMD16PL	D6	60V	42V	60V
SMD18PL	D8	80V	56V	80V

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 SMD15PL-16PL SMD18PL	V_F	0.70V 0.85V	$I_{FM}=1.0A$; $T_J=25^\circ\text{C}$ (Note 3)
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1mA 10mA	$T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$
Typical Junction Capacitance SMD15PL-16PL SMD18PL	C_J	40pF 30pF	Measured at 1.0MHz, $V_R=4.0V$

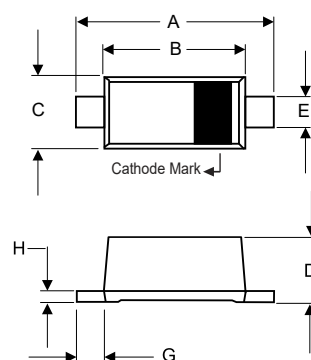
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

2. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

3. Pulse Test: Pulse Width 300 μsec , Duty Cycle 2%

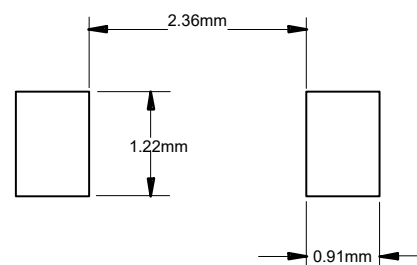
1 Amp Schottky Rectifier 50 to 80 Volts

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

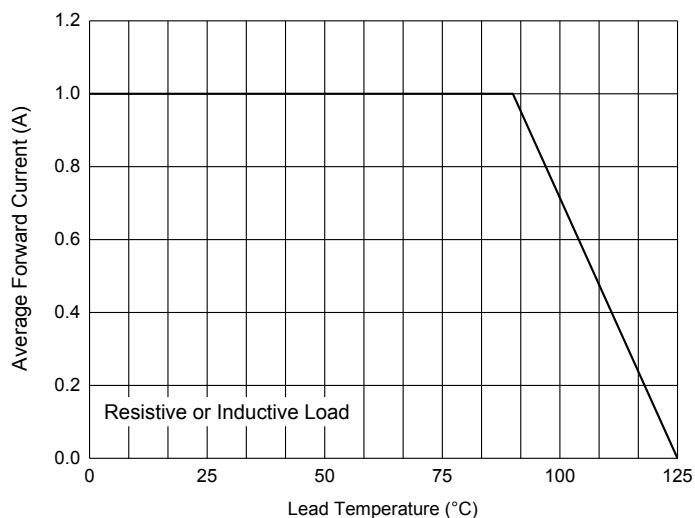


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

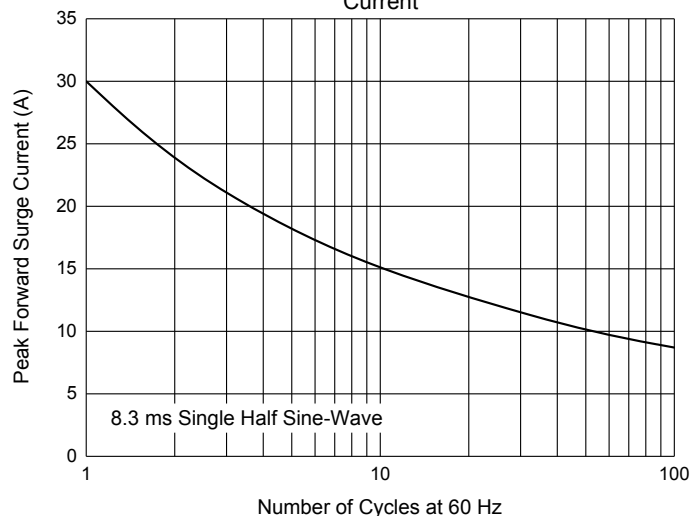


Fig. 3 - Typical Instantaneous Forward Characteristics

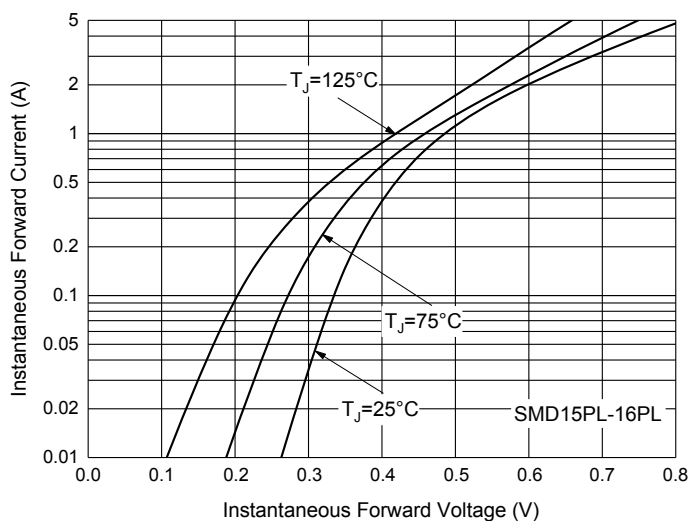


Fig. 4 - Typical Instantaneous Forward Characteristics

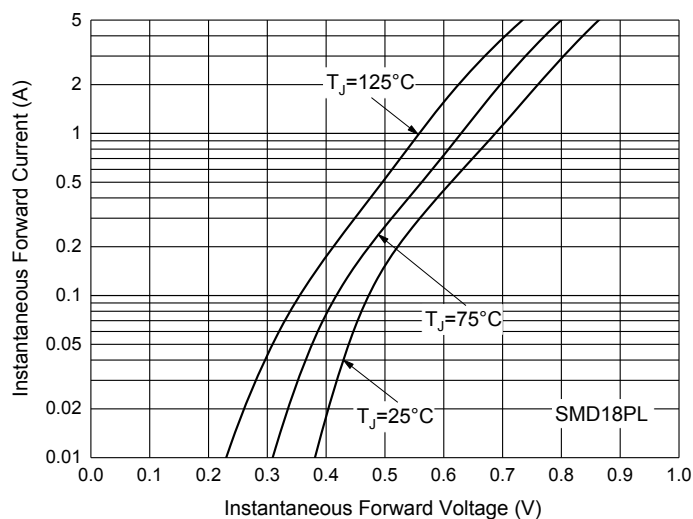


Fig. 5 - Typical Reverse Leakage Characteristics

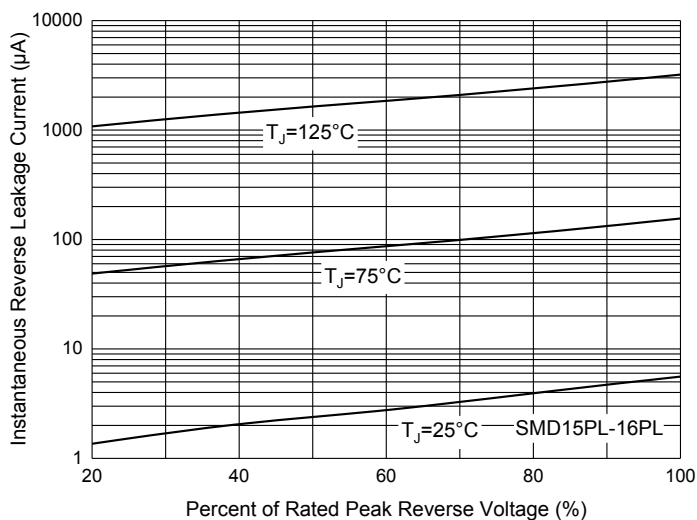
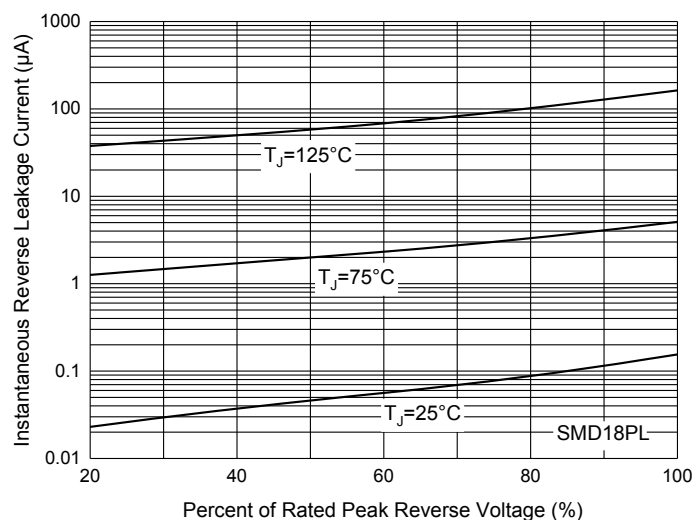


Fig. 6 - Typical Reverse Leakage Characteristics



Ordering Information

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

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