



THE DATASHEET OF S8ML-TP



Features

- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- High Surge Current Capability
- Low Leakage
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix Designates Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 45°C/W Junction to Ambient
- Thermal Resistance: 12°C/W Junction to Lead

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
S8AL	S8AL	50V	35V	50V
S8BL	S8BL	100V	70V	100V
S8DL	S8DL	200V	140V	200V
S8GL	S8GL	400V	280V	400V
S8JL	S8JL	600V	420V	600V
S8KL	S8KL	800V	560V	800V
S8ML	S8ML	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	8.0A	$T_L=100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	200A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	V_F	1.05V 0.94V(Typ.)	$I_{FM}=8.0A$; $T_J=25^\circ\text{C}^*$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μ A 100 μ A	$T_J=25^\circ\text{C}$; $T_J=100^\circ\text{C}$
Typical Junction Capacitance	C_J	150pF	Measured at 1.0MHz, $V_R=4.0V$

Note:

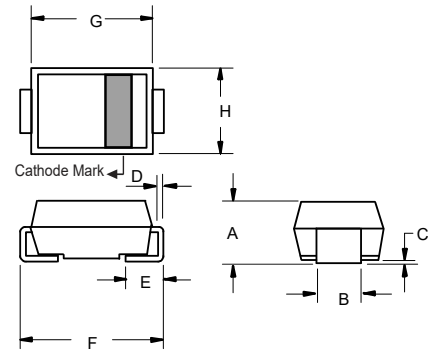
1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

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

*Pulse Test: Pulse Width 300 μ sec, Duty Cycle 1%

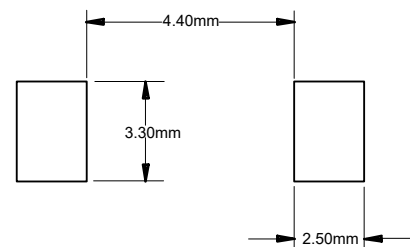
**8 Amp Glass Passivated Rectifier
50 to 1000 Volts**

SMC (DO-214AB)



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.079	0.103	2.00	2.62	
B	0.108	0.128	2.75	3.25	
C	0.002	0.008	0.051	0.203	
D	0.006	0.012	0.152	0.305	
E	0.030	0.060	0.76	1.52	
F	0.305	0.320	7.75	8.13	
G	0.260	0.280	6.60	7.11	
H	0.220	0.245	5.59	6.22	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

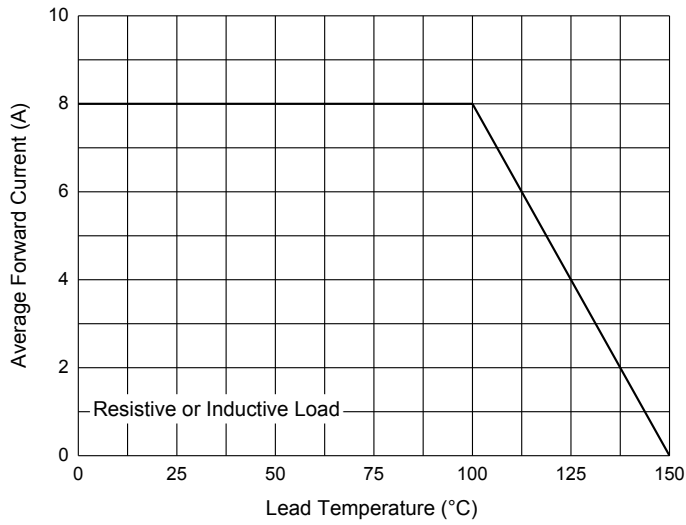


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

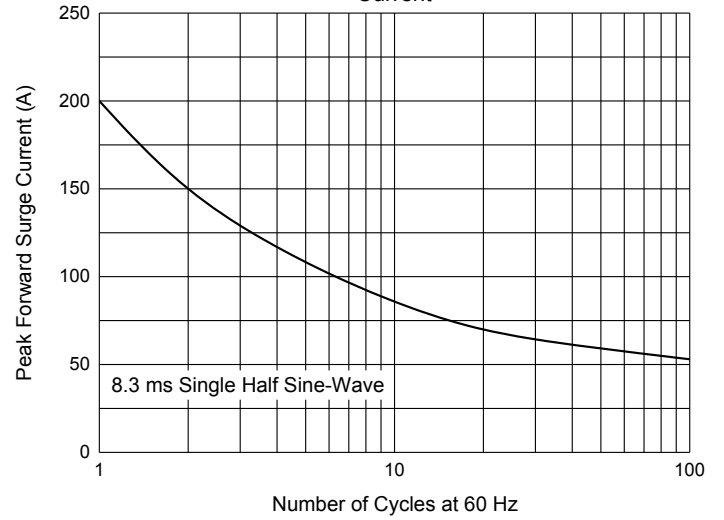


Fig. 3 - Typical Instantaneous Forward Characteristics

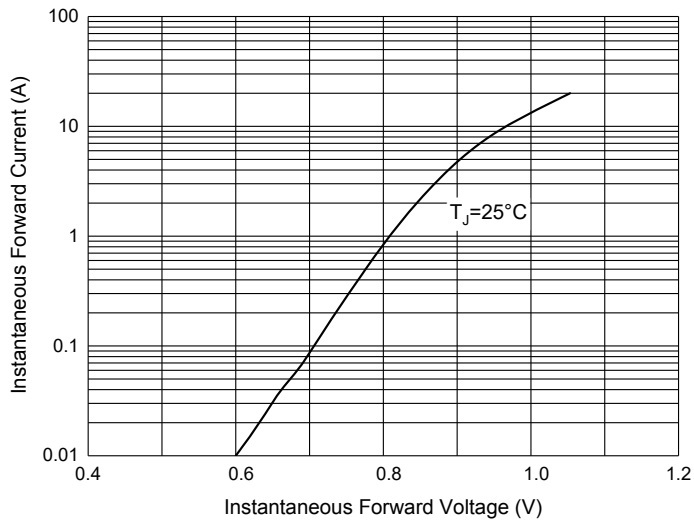
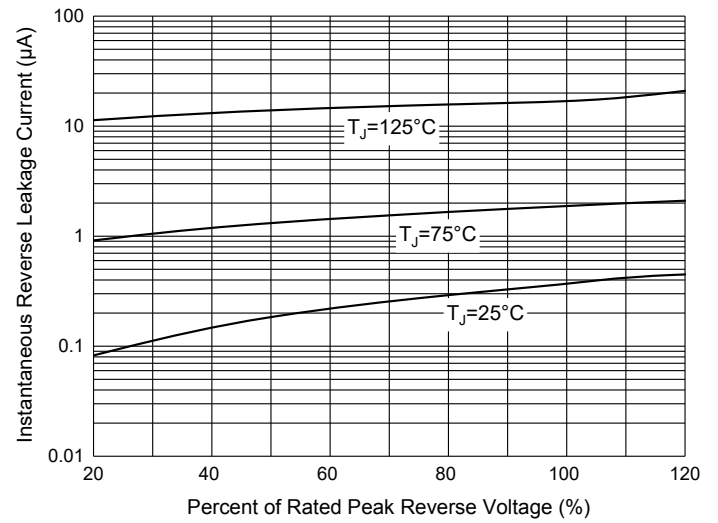


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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