

Features

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free. "Green" Device (Note 2)
- Glass Passivated Diode Construction
- Super Fast Recovery and Low Switching Loss
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Surface Mount Package

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 10°C/W Junction to Case
- Typical Thermal Resistance: 25°C/W Junction to Lead
- Typical Thermal Resistance: 62.5°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SLMB2S	SLB2S	200V	140V	200V
SLMB4S	SLB4S	400V	280V	400V
SLMB6S	SLB6S	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

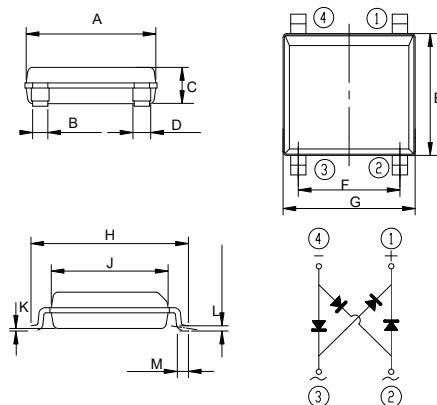
Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 25^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, Half Sine
Peak Forward Voltage	V_F	0.95V 1.30V 1.70V	$I_{FM} = 0.5A$; $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	10 μ A	$T_A = 25^\circ\text{C}$
Maximum Reverse Recovery Time	t_{rr}	35ns	$I_F = 0.5A$, $I_R = 1.0A$, $I_{rr} = 0.25A$
Rating For Fusing	I^2t	3.7 A ² s	$t < 8.30ms$

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.

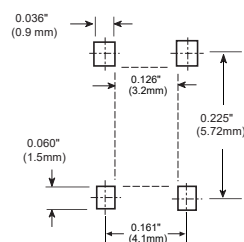
1.0 Amp Super Fast Recovery Bridge Rectifier 200 to 600 Volts

LMBS-1



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	MIN 0.197	MAX 0.205	MIN 4.90	MAX 5.20	
B	0.024				0.60
C	---	0.059	---	1.50	
D	0.024	0.032	0.60	0.80	
E	---	0.189	---	4.80	
F	0.150	0.165	3.80	4.20	
G	---	0.209	---	5.30	
H	0.236	0.252	6.00	6.60	
J	0.177	0.185	4.30	4.70	
K	0.0009	0.004	0.02	0.21	
L	0.006	0.012	0.15	0.30	
M	0.017	0.031	0.25	0.80	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

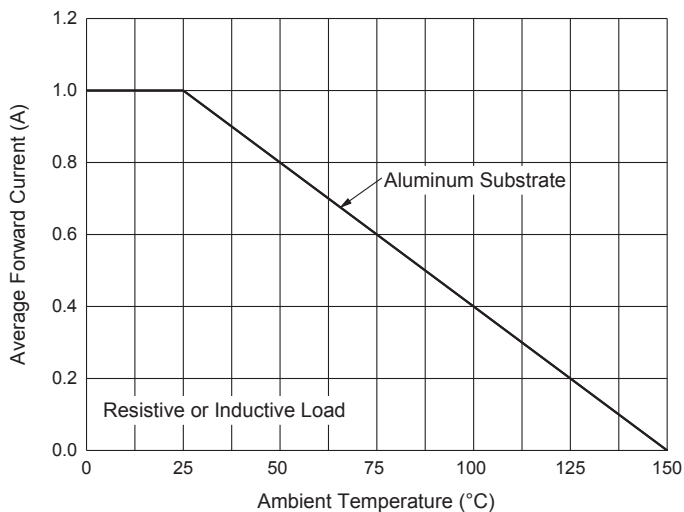


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

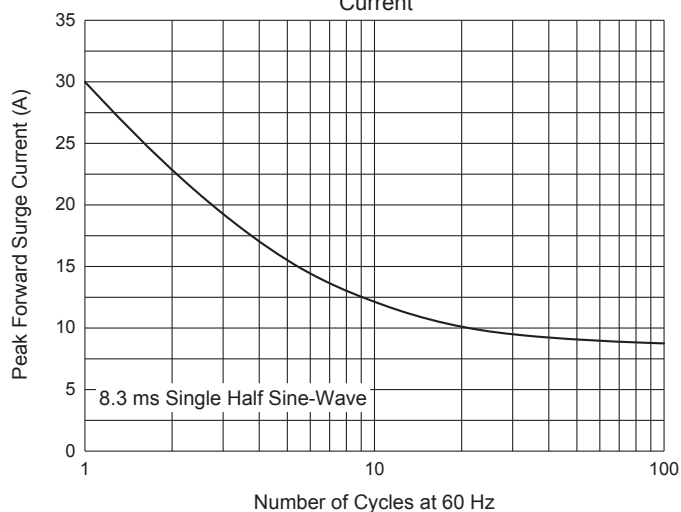


Fig. 3 - Typical Instantaneous Forward Characteristics

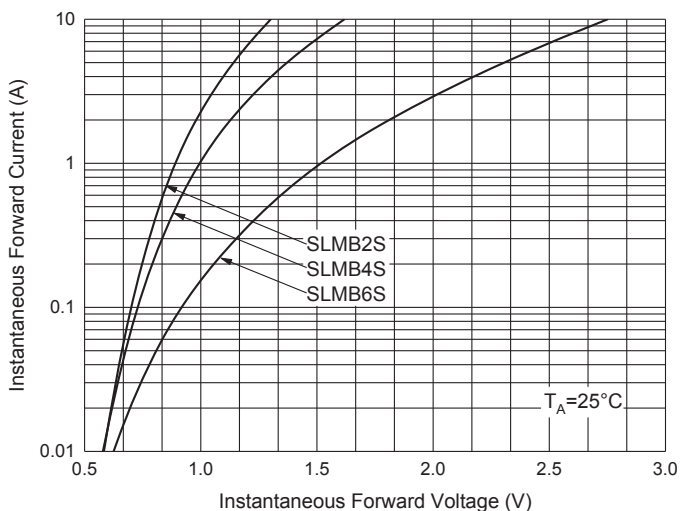


Fig. 4 - Typical Reverse Leakage Characteristics

