

Features

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free. "Green" Device (Note 2)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- High Surge Current Capability
- Low Forward Voltage Drop

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 20°C/W Junction to Lead
- Typical Thermal Resistance(Note3): 76°C/W Junction to Ambient
- Typical Thermal Resistance(Note4): 134°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
LMB310SL	310SL	100V	70V	100V

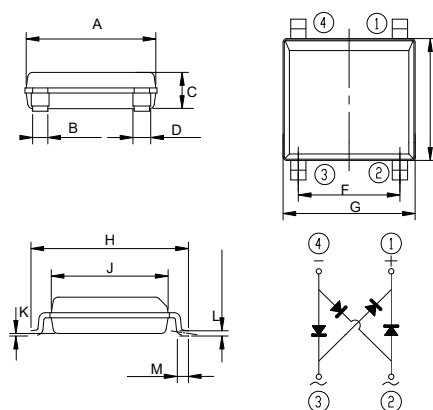
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0A	See Fig1
Peak Forward Surge Current	I_{FSM}	60A	8.3ms, Half Sine
Instantaneous Forward Voltage	V_F	0.55V(Max.) 0.47V(Typ.) 0.55V(Typ.)	$I_F = 1.5A; T_J = 25^\circ C$ $I_F = 3A; T_J = 125^\circ C$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1mA 10mA	$T_J = 25^\circ C$ $T_J = 125^\circ C$

- 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. Between Junction and Ambient, on Alumina Substrate
 4. Between Junction and Ambient, on Glass-epoxy Substrate

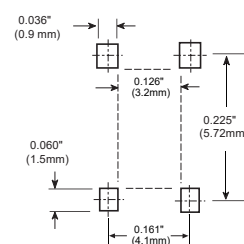
3A Low VF Surface Mount Schottky Bridge Rectifier 100V

LMBS-1



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.197	0.205	4.90	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 - I_o - T_a Curve

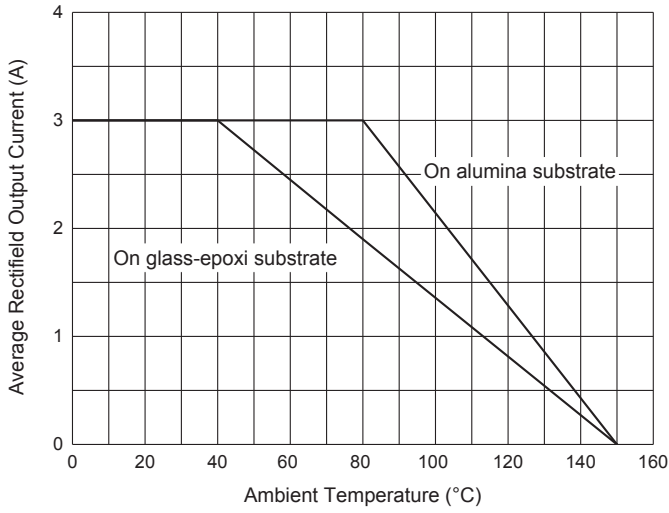


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

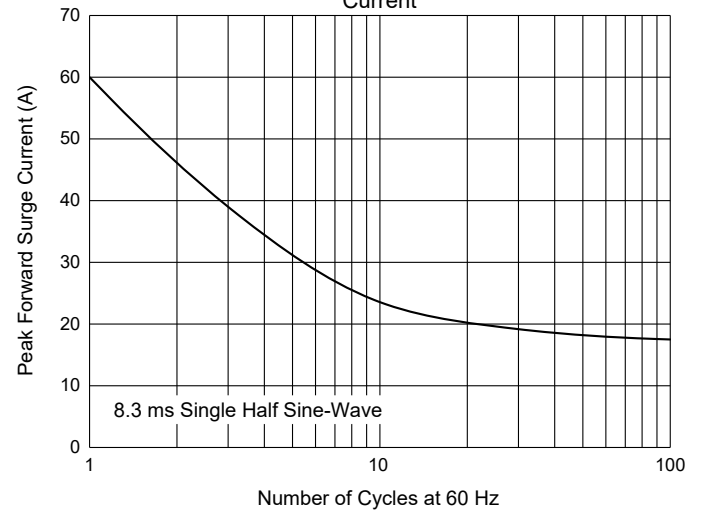


Fig. 3 - Typical Instantaneous Forward Characteristics

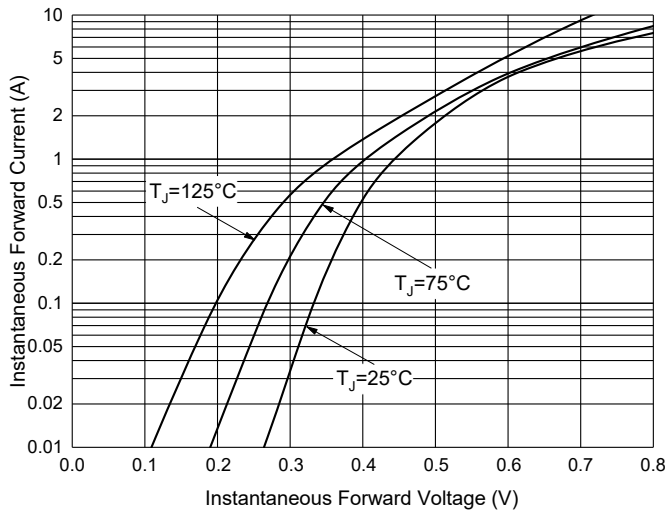


Fig. 4 - Typical Reverse Leakage Characteristics

