

## 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

## 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
LMB32S	LMB32S	20V	14V	20V
LMB34S	LMB34S	40V	28V	40V
LMB36S	LMB36S	60V	42V	60V
LMB38S	LMB38S	80V	56V	80V
LMB310S	LMB310S	100V	70V	100V

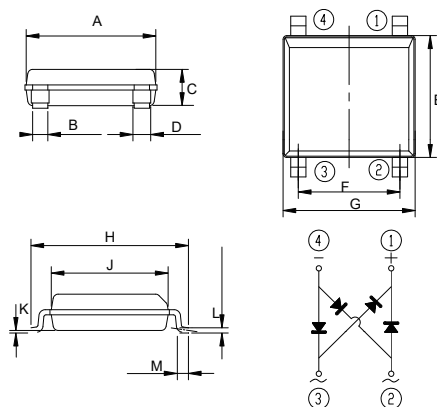
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	3.0A	See Fig1
Peak Forward Surge Current	$I_{FSM}$	70A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage LMB32S~LMB34S LMB36S LMB38S~LMB310S	$V_F$	0.55V 0.65V 0.85V	$I_{FM} = 1.5A;$ $T_A = 25^\circ C$
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.5mA	$T_A = 25^\circ C$

- 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

# 3 Amp Surface Mount Schottky Bridge Rectifier 20 to 100 Volts

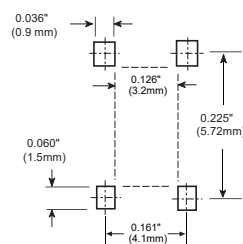
## LMB3-1



### DIMENSIONS

DIM	INCHES		MM		NOTE
	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<sub>o</sub>-T<sub>a</sub> Curve

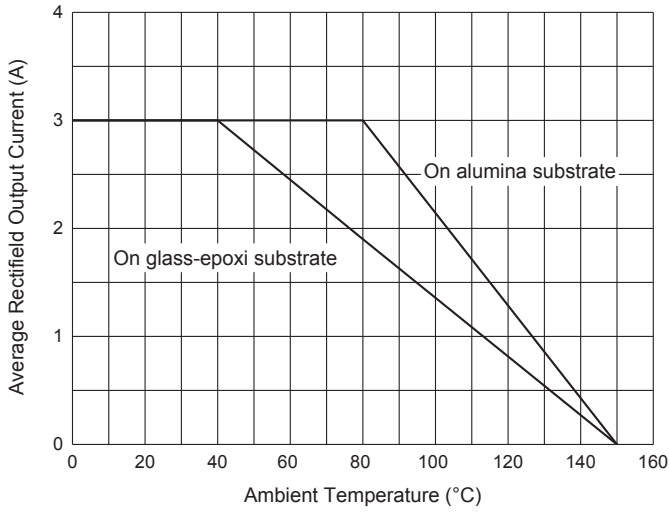


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

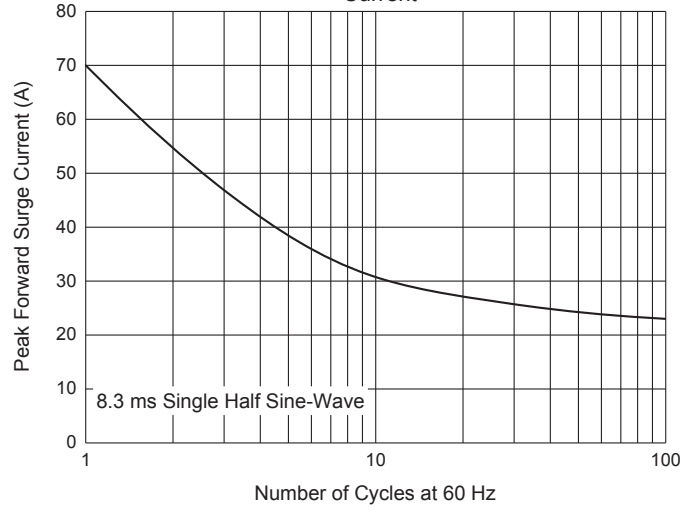


Fig. 3 - Typical Instantaneous Forward Characteristics

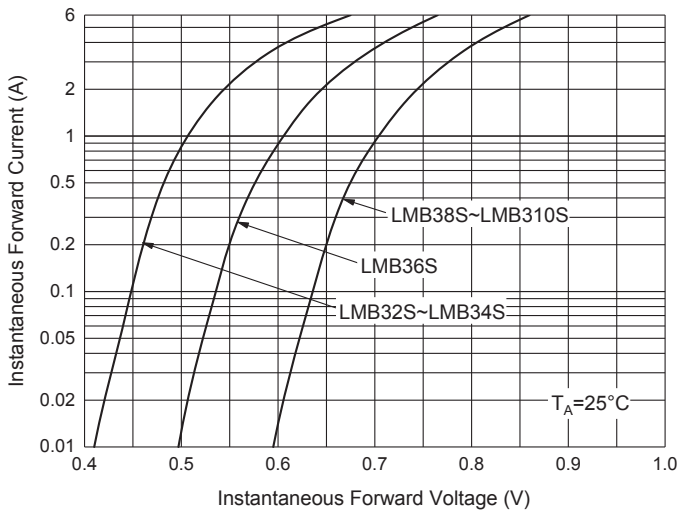


Fig. 4 - Typical Reverse Leakage Characteristics

