

Features

- Lead Free Finish/RoHS Compliant (Note 1) ("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

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: 80°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
LMB12S	LB12S	20V	14V	20V
LMB14S	LB14S	40V	28V	40V
LMB16S	LB16S	60V	42V	60V
LMB18S	LB18S	80V	56V	80V
LMB110S	LB110S	100V	70V	100V

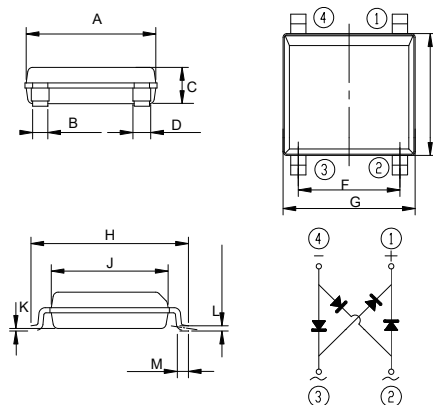
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Rectified Output Current	$I_{F(AV)}$	1.0A	$T_A=80^\circ\text{C}$ (Note 3) $T_A=40^\circ\text{C}$ (Note 4)
Peak Forward Surge Current	I_{FSM}	30A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage LMB12S~LMB14S LMB16S LMB18S~LMB110S	V_F	0.55V 0.65V 0.85V	$I_{FM} = 0.5A$; $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.1mA	$T_A = 25^\circ\text{C}$
Typical Junction Capacitance	C_J	50pF	Measured at 1.0MHz, $V_R=4.0V$

- 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. On Alumina Substrate, See Fig 1.
 4. On Glass-epoxy Substrate, See Fig 1.

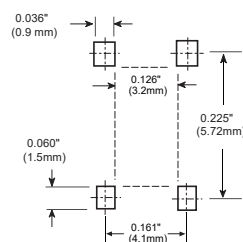
1 Amp Surface Mount Schottky Bridge Rectifier 20 to 100 Volts

LMBS-1



DIM	DIMENSIONS				NOTE
	INCHES		MM		
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 - Forward Current Derating Curve

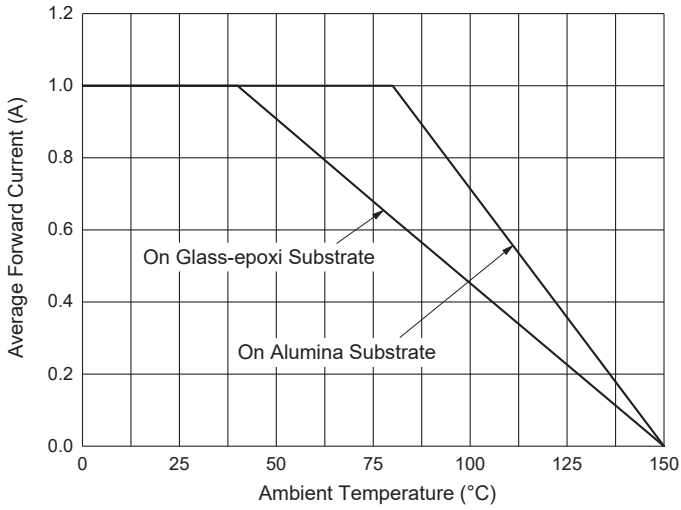


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

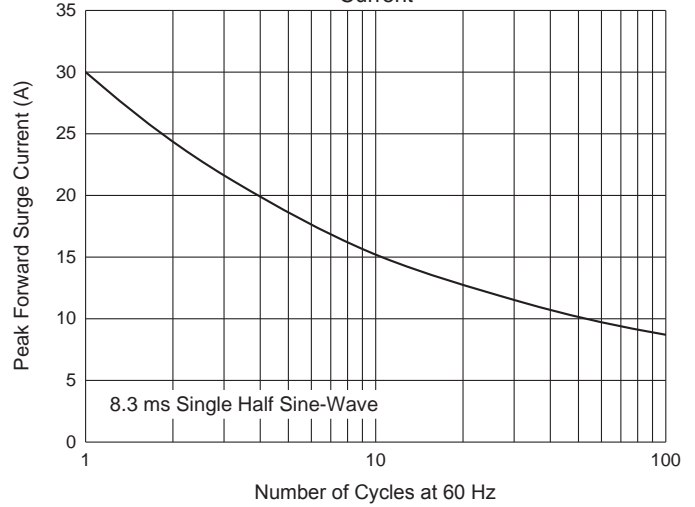


Fig. 3 - Typical Instantaneous Forward Characteristics

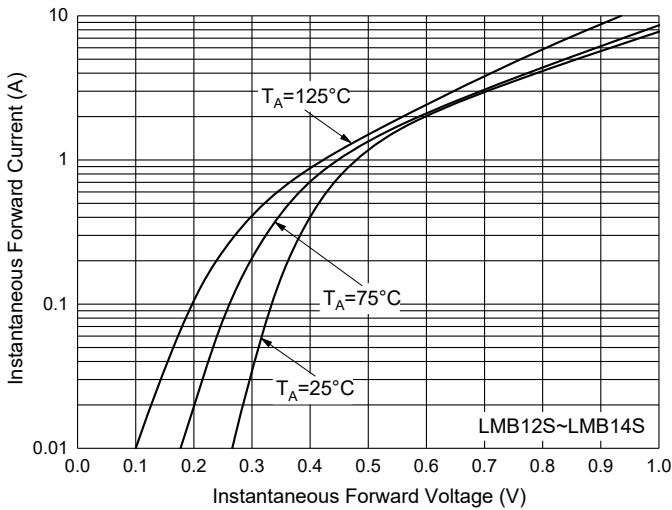


Fig. 4 - Typical Instantaneous Forward Characteristics

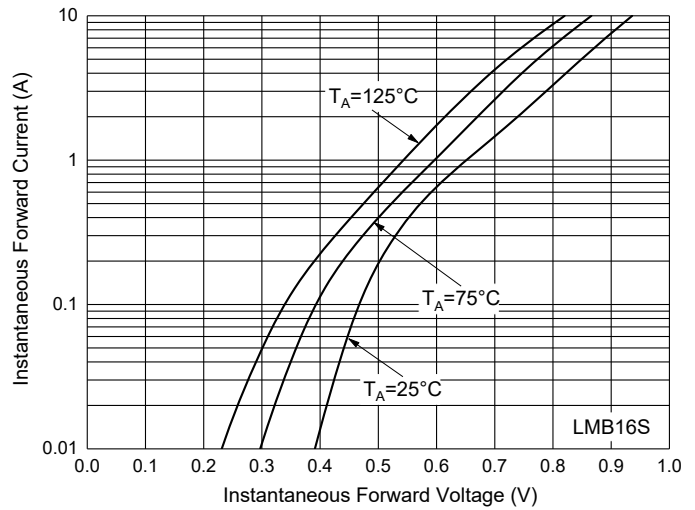


Fig. 5 - Typical Instantaneous Forward Characteristics

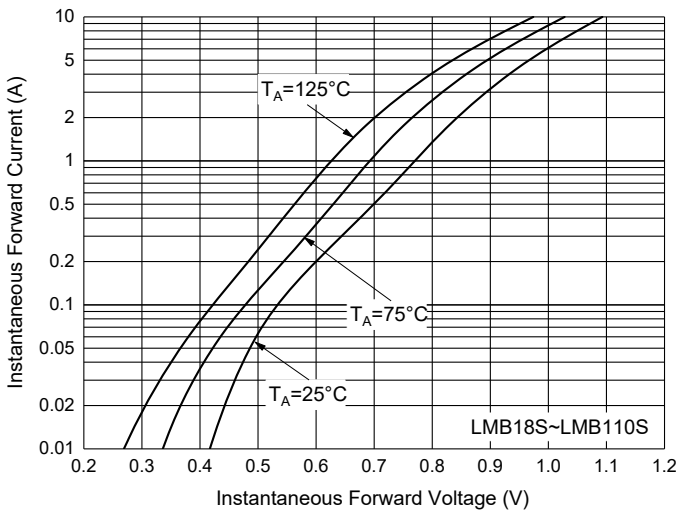
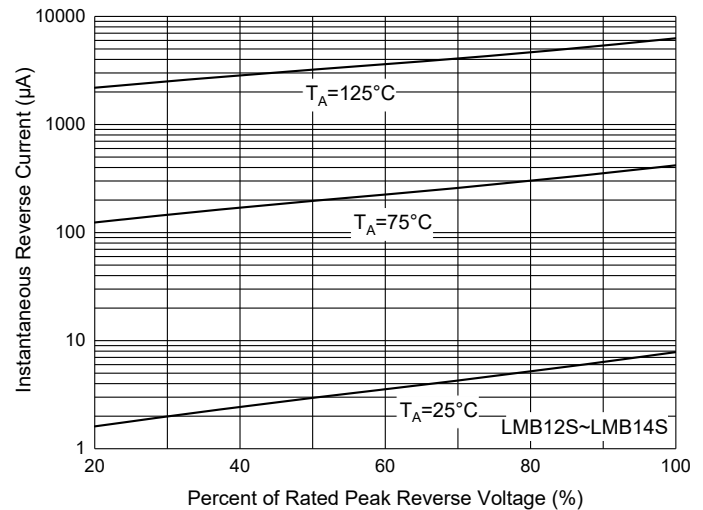


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Reverse Leakage Characteristics

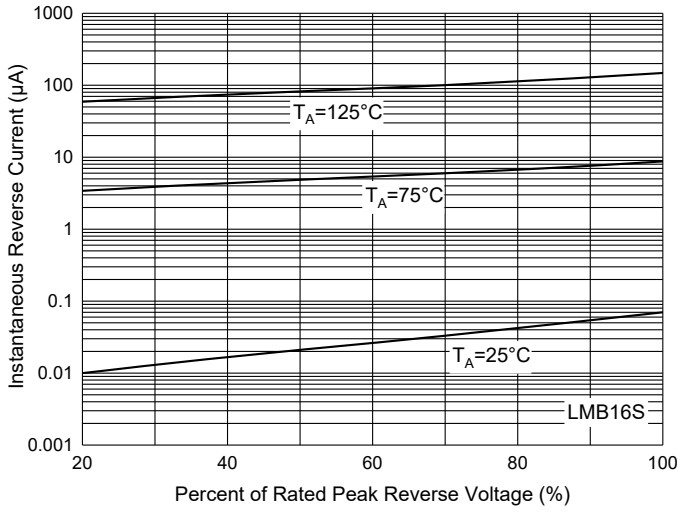


Fig. 8 - Typical Reverse Leakage Characteristics

