Features

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

1 Amp Surface Mount Schottky Bridge Rectifier 20 to 100 Volts

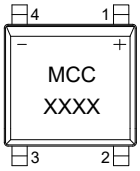
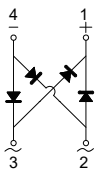
Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value					Unit
		LMB12S	LMB14S	LMB16S	LMB18S	LMB110S	
Peak Repetitive Reverse Voltage	V_{RRM}	20	40	60	80	100	V
Working Peak Reverse Voltage	V_{RWM}						
DC Blocking Voltage	V_R						
RMS Reverse Voltage	V_{RMS}	14	28	42	56	70	V
Average Rectified Forward Current	$I_{F(AV)}$	1					A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	30					A
Current Squared Time @1ms≤t≤8.3ms	I^2t	3.735					A^2s

Marking code

Part Number	Marking Code
LMB12S	LB12S
LMB14S	LB14S
LMB16S	LB16S
LMB18S	LB18S
LMB110S	LB110S

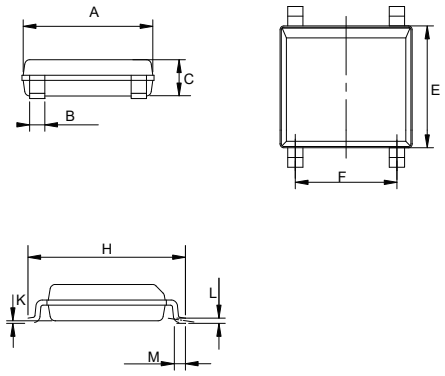
Internal Structure

Pin	Description	Simplified Outline	Graphic Symbol
1	Anode	 XXXX: Marking Code	
4	Cathode		
2&3	AC		

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

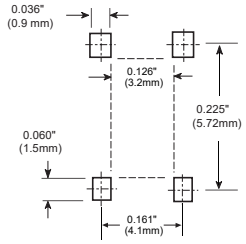
2. High temperature solder exemption applied, see EU directive annex 7a.

LMBS-1



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.193	0.205	4.90	5.20	
B	0.024	0.031	0.60	0.80	
C	---	0.059	---	1.50	
E	0.170	0.185	4.30	4.70	
F	0.150	0.165	3.80	4.20	
H	0.236	0.260	6.00	6.60	
K	0.0008	0.008	0.02	0.21	
L	0.006	0.012	0.15	0.30	
M	0.001	0.031	0.25	0.80	

Suggested Solder Pad Layout



Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$Rth_{(J-L)}$	Thermal Resistance from Junction to Lead			25		°C/W
$Rth_{(J-A)}$	Thermal Resistance from Junction to Ambient			62.5		°C/W

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage						
LMB12S~LMB14S	V_F	I_F=0.5A;T_J=25°C			0.55	V
LMB16S					0.65	
LMB18S~LMB110S					0.85	
Reverse Current						
LMB12S~LMB16S	I_R	at Rated V_R;T_J=25°C			0.1	mA
		at Rated V_R;T_J=125°C			20	
LMB18S~LMB110S		at Rated V_R;T_J=25°C			0.01	
		at Rated V_R;T_J=125°C			5	
Junction Capacitance						
LMB12S~LMB14S	C_J	V_R=4V;f=1MHz;T_J=25°C		50		pF
LMB16S				40		
LMB18S~LMB110S				30		

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

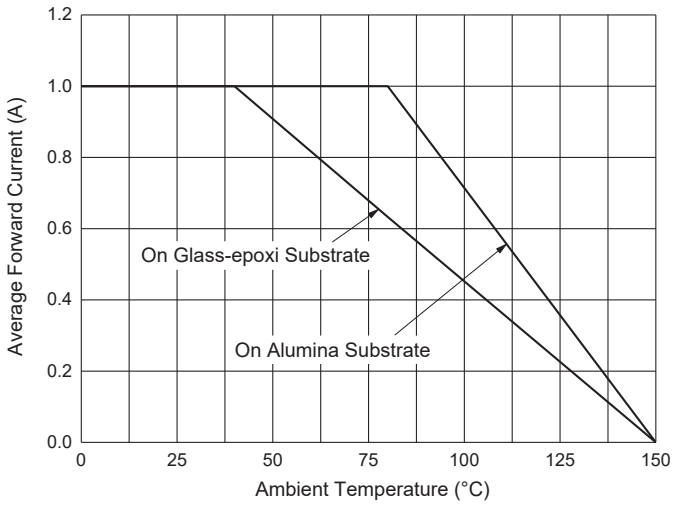


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

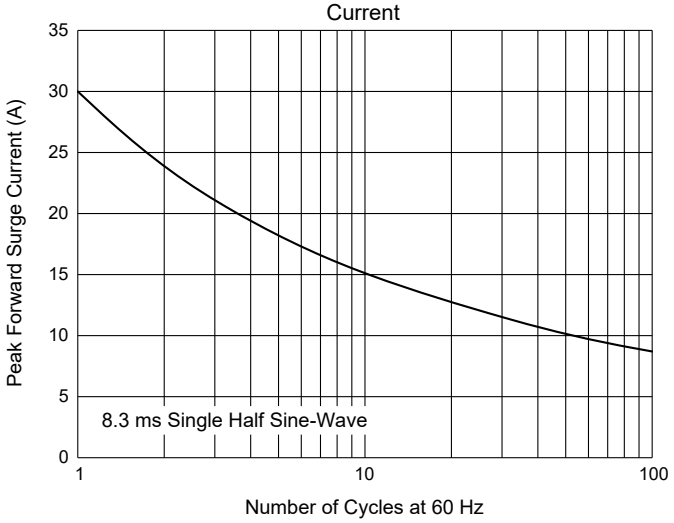


Fig. 3 - Typical Forward Characteristics

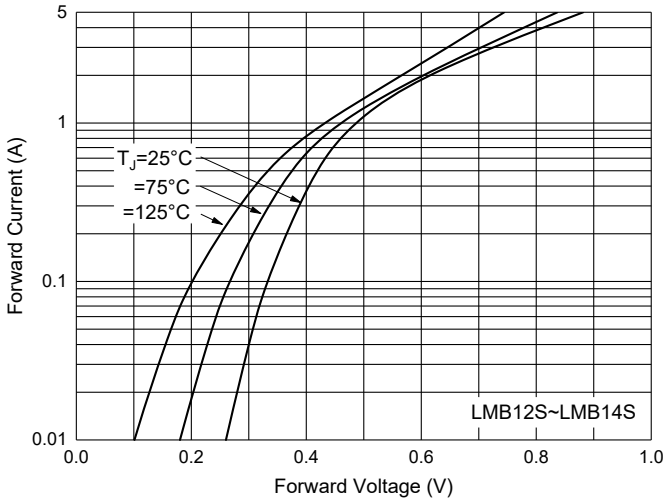


Fig. 4 - Typical Reverse Leakage Characteristics

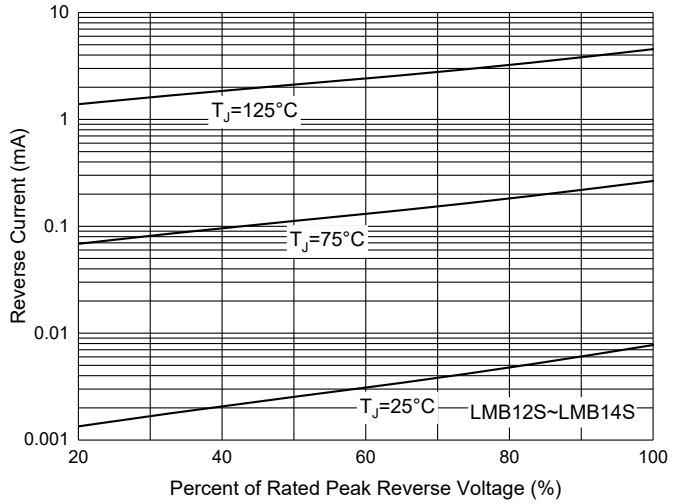


Fig. 5 - Typical Forward Characteristics

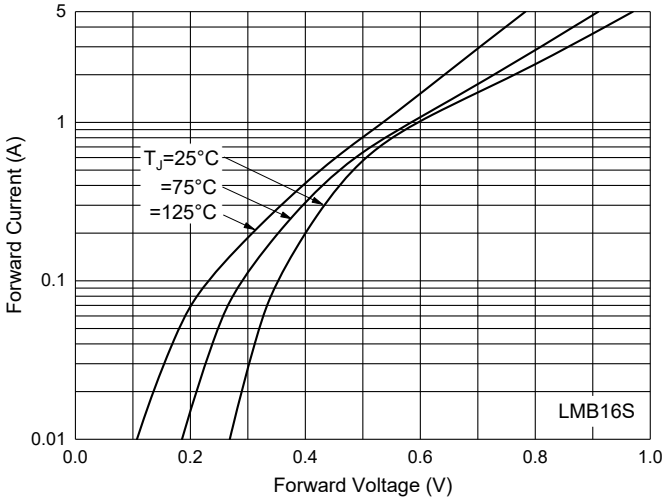
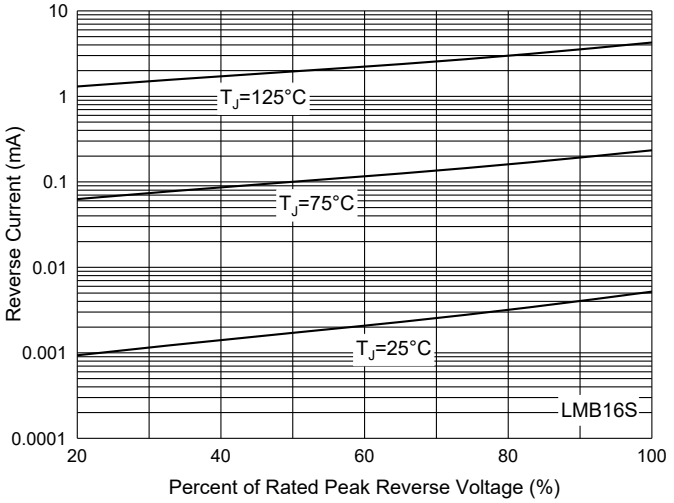


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Typical Forward Characteristics

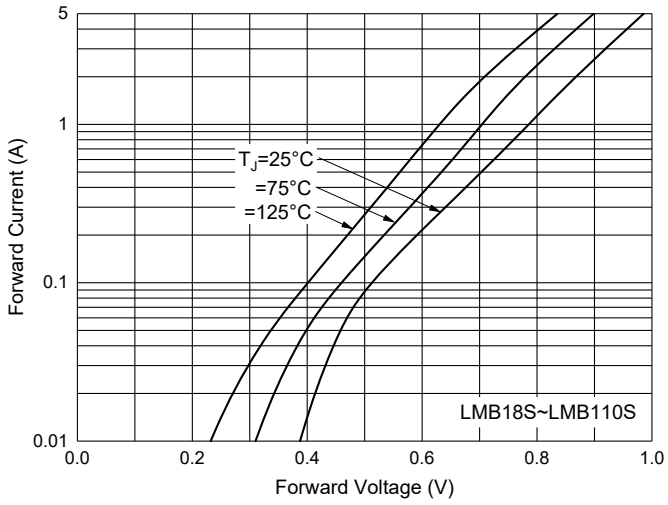


Fig. 8 - Typical Reverse Leakage Characteristics

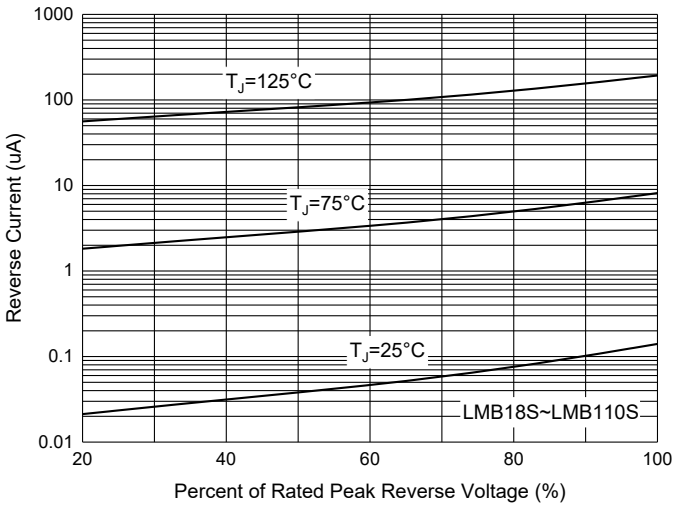
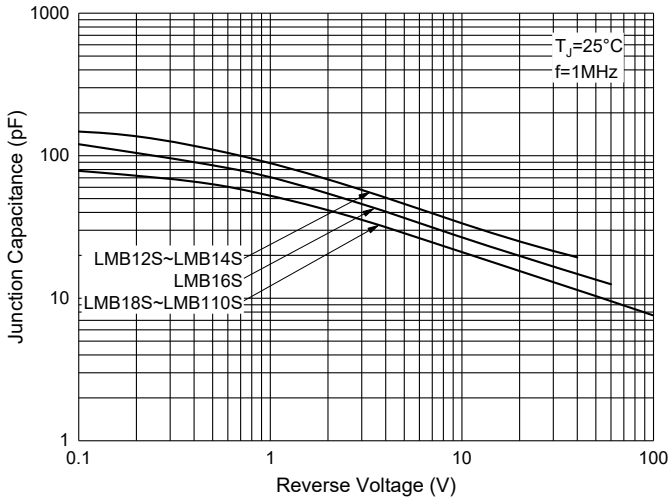


Fig. 9 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:5Kpcs/Reel

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