LMB1005S THRU LMB110S

1A Miniature Glass Passivated Single-Phase Surface Mount Bridge Rectifiers

■ Features

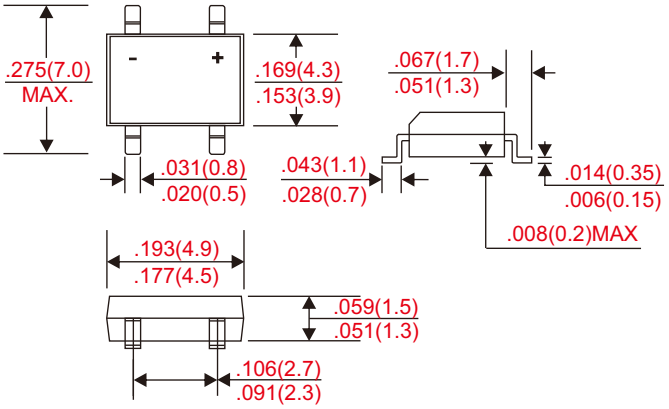
- Surge overload ratings to 30 amperes peak.
- Save space on printed circuit board.
- Ideal for automated replacement.
- Reliable low cost construction utilizing molded plastic technology results in inexpensive product.
- Glass passivated chip junctions.
- Suffix "G" indicates Halogen-free part, ex.LMB1005SG.

■ Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, LMBS
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : marked on body

■ Outline

LMBS



Dimensions in inches and (millimeters)

■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Maximum aversge forward rectified output current	at T_A = 40°C	I_O			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			30	A
Reverse current	V_R = V_{RRM} T_A = 25°C	I_R			5.0	uA
	V_R = V_{RRM} T_A = 100°C				500	
Typical junction capacitance	at 1.0MHz and applied reverse voltage of 4.0V DC	C_J		15		pF
Storage temperature		T_{STG}	-55		+150	°C

Symbol	Marking code	Max. repetitive peak reverse voltage V_{RRM} (V)	Max. RMS voltage V_{RMS} (V)	Max. DC blocking voltage V_R (V)	Max. forward voltage @0.8A, T_A = 25°C V_F (V)	Operating temperature T_J (°C)
LMB1005S	MB105S	50	35	50	1.0	-55 ~ +150
LMB101S	MB11S	100	70	100		
LMB102S	MB12S	200	140	200		
LMB104S	MB14S	400	280	400		
LMB106S	MB16S	600	420	600		
LMB108S	MB18S	800	560	800		
LMB110S	MB110S	1000	700	1000		

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■ Rating and characteristic curves

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

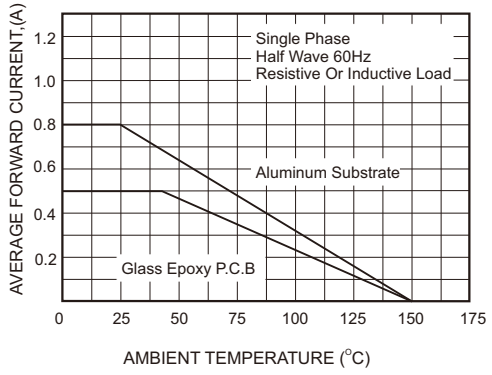


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

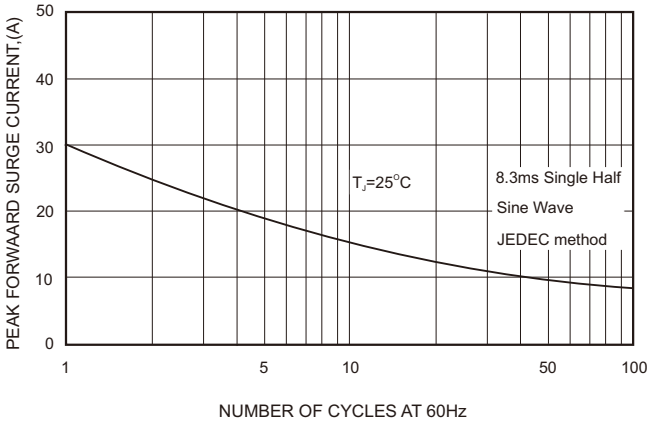


FIG.3-TYPICAL FORWARD CHARACTERISTICS

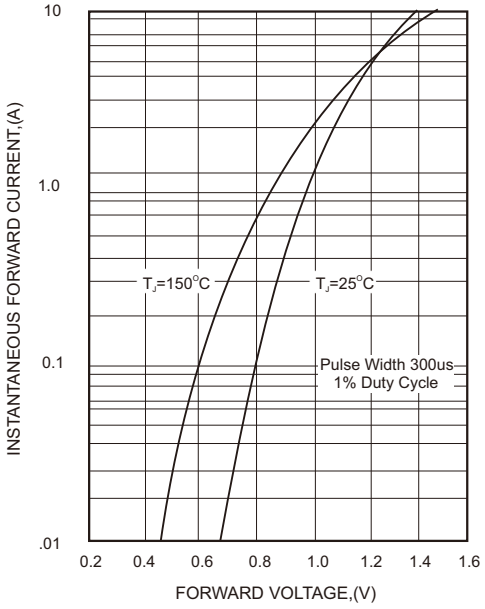
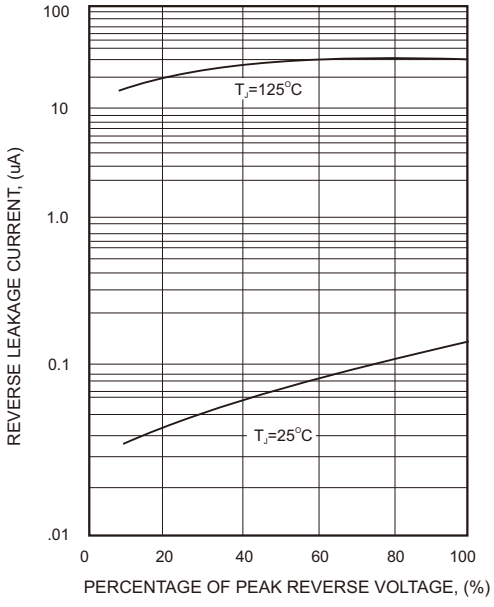


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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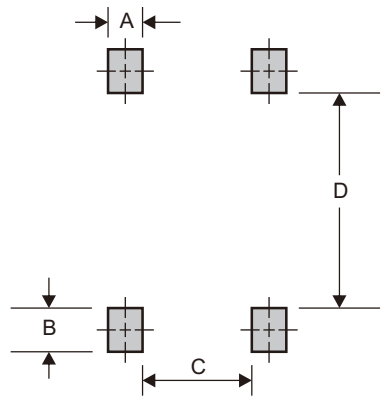
■ LMBS foot print



A	B	C	D
0.030 (0.76)	0.059 (1.50)	0.070 (1.78)	0.226 (5.75)

Dimensions in inches and (millimeters)

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