

LMD02 thru LMD10

Glass Passivated Bridge Rectifiers
 Reverse Voltage 200 to 1000V Forward Current 0.5A

Features

- Glass passivated standard bridge rectifiers
- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260°C, 10 seconds



LPMB

Applications

For use of general purpose AC-DC bridge rectifications in power supplies, chargers, office appliances, home appliances and telecom devices.



Maximum Ratings (T_A = 25°C unless otherwise noted)

Parameter	Symbol	LMD02	LMD04	LMD06	LMD08	LMD10	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	I _{F(AV)}	0.5 ⁽¹⁾ 0.8 ⁽²⁾					A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I _{FSM}	30					A
Rating for Fusing (t<8.3ms)	i ² t	3.7					A ² sec
Operating Junction and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150					°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Test Conditions	Symbol	LMD02	LMD04	LMD06	LMD08	LMD10	Unit
Maximum Instantaneous Forward Voltage	0.4 A	V _F	1				V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	5				μA	
	T _A =125°C		100					
Typical Junction Capacitance	4.0 V, 1 MHz	C _J	15				pF	

Thermal Characteristics

Parameter	Symbol	LMD02	LMD04	LMD06	LMD08	LMD10	Unit
Parameter	R _{θJA}	85 ⁽¹⁾				°C/W	
	R _{θJA}	70 ⁽²⁾					
	R _{θJL}	20 ⁽¹⁾					

- Notes: 1. On glass epoxy PCB, mounted on 1.3*1.3mm solder pads
 2. On 20*20mm aluminum substrate PCB with 1.3*1.3mm solderr pads

Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

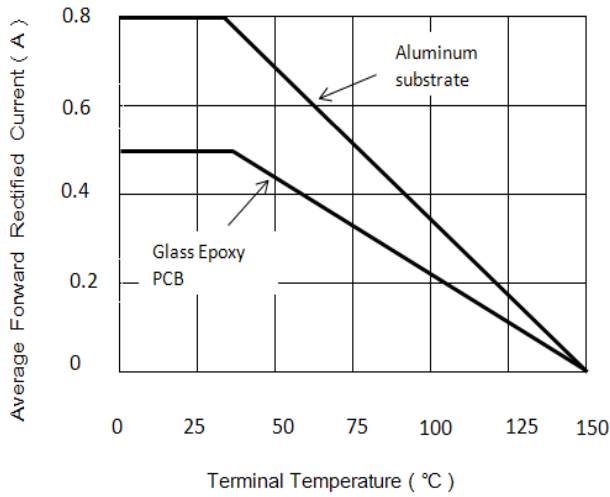


Figure 1. Forward Current Derating Curve

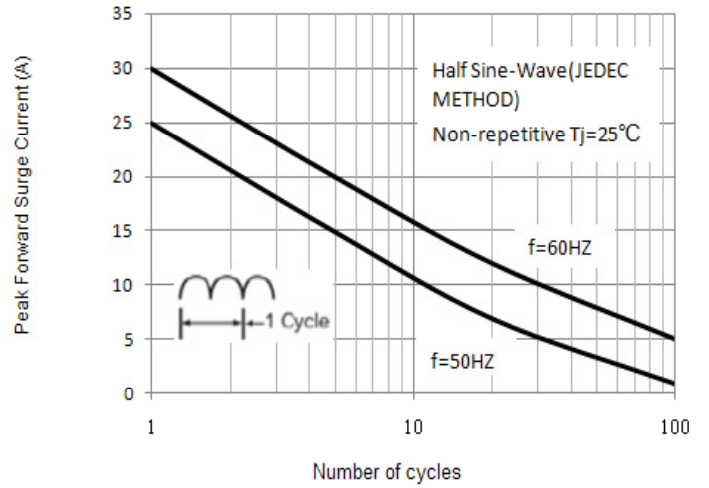


Figure 2. Maximum Non-repetitive Surge Current Per Leg

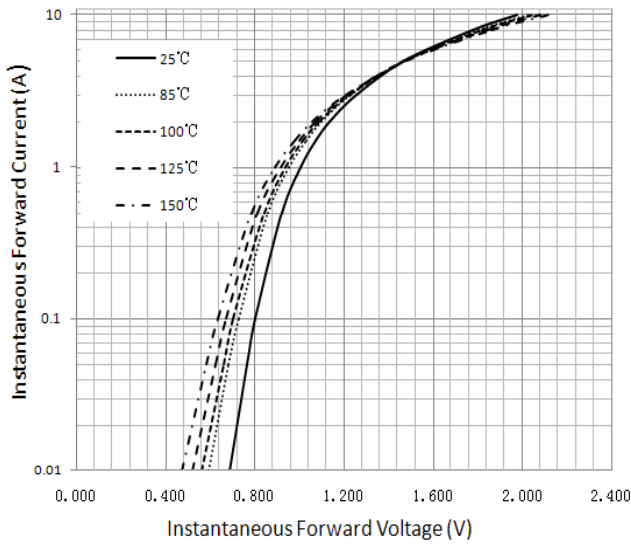


Figure 3. Typical Forward Characteristics

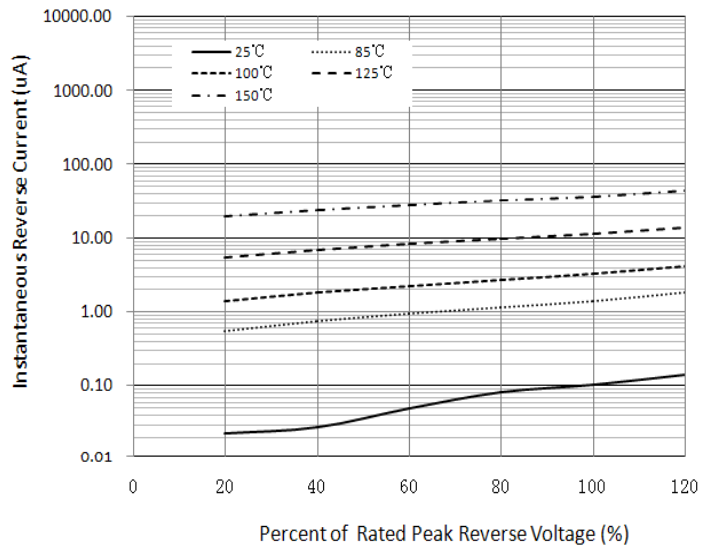


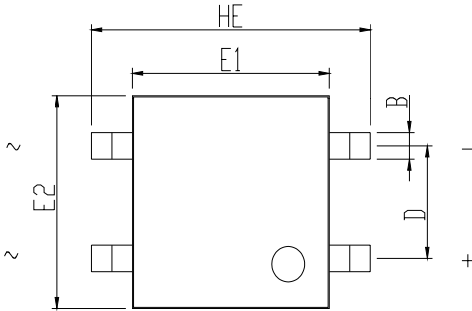
Figure 4. Typical Reverse Characteristics

LMD02 thru LMD10

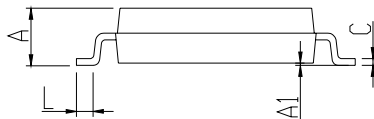
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Package Outline Dimensions

LPMB

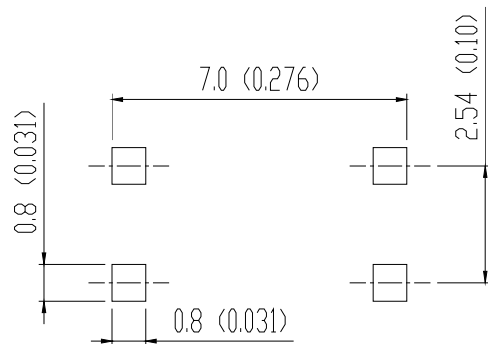


DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	1.2	1.35	0.047	0.053
A1	0	0.1	0.000	0.004
B	0.5	0.75	0.020	0.030
C	0.1	0.25	0.004	0.010
D	2.54 typ.		0.10 typ.	
E1	4.7	4.9	0.185	0.193
E2	4.7	4.9	0.185	0.193
L	0.4	0.7	0.016	0.028
HE	6.65	6.95	0.262	0.274



Mounting pad layout

in mm(inch)



Packing Information

Packing quantities:

3000 pcs/Reel, 14 Reels/Box; 12mm Tape, 13" Reel

Marking: LD02-LD10

Tape & Reel Specification

