

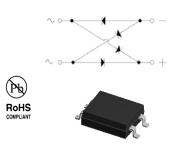
## LMD02 thru LMD10

Low Profile Miniature Single Phase Surface Mount Bridge Rectifiers Reverse Voltage 200~1000V Output 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  $^\circ\text{C},$  10 s
- Low profile, Max Height 1.30mm

### **Typical Applications**



LPMB

For use of general purpose AC to DC bridge rectification in power supply, charger, office appliance, home appliance and telecome device.

Maximum Ratings (TA = 25 °C unless otherwise noted)							
Parameter	Symbol	LMD02	LMD04	LMD06	LMD08	LMD10	Unit
Maximum repetitive peak reverse voltage	VRRM	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	200	400	600	800	1000	V
Maximum average output rectified current	lo(AV)	0.5 (1)					А
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load	IFSM	30					A
Rating for fusing(t<8.3ms)	l <sup>2</sup> t	3.7 A <sup>2</sup> s					A <sup>2</sup> sec
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150					°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)								
Parameter	Test Conditions	Symbol	LMD02	LMD04	LMD06	LMD08	LMD10	Unit
Maximum instantaneous forward voltage	IF=0.4 A, TA=25℃	V <sub>F</sub>	1				1	Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25℃	5 I <sub>R</sub> 100					μA	
Typical junction capacitance	TA=125℃ 4.0 V, 1 MHz	CJ	15				pF	

Thermal Characteristics							
Parameter	Symbol	LMD02	LMD04	LMD06	LMD08	LMD10	Unit
$\mathbf{T}$	$R_{ extsf{ heta}JA}$		60				℃/W
Typical thermal resistance <sup>(1)</sup>	$R_{ extsf{ heta}JC}$	25					CIVV

Notes:

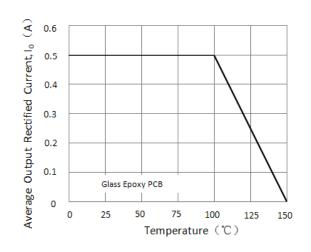
1. On glass epoxy PCB, mounted on 1.3\*1.3mm solder pads



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#### Ratings and Characteristics Curves



(TA = 25°C unless otherwise noted)

Figure 1. Output Rectifier Current Derating Curve

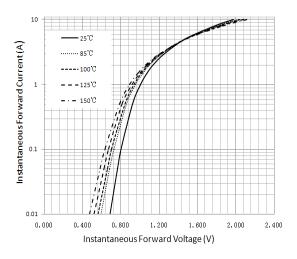


Figure 3. Typical Forward Characteristics

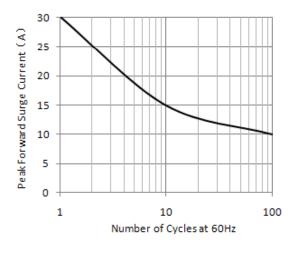


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

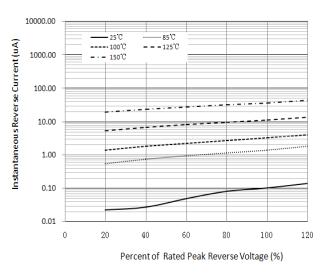


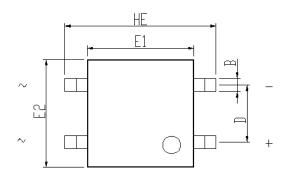
Figure 4. Typical Reverse Characteristics



## LMD02 thru LMD10

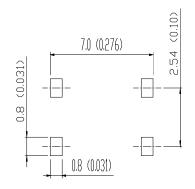
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### Package Outline Dimensions



DIM	Unit	: mm	Unit: inch		
	MIN	MAX	MIN	MAX	
А	1.2	1.3	0.047	0.051	
A1	0	0.1	0.000	0.004	
В	0.5	0.75	0.020	0.030	
С	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)

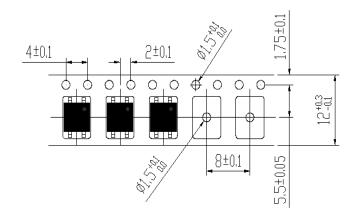




### **Packing Information**

Packing quantities: 4000 pcs/Reel, 15 Reels/Box; 12mm Tape, 13" Reel

#### Tape & Reel Specification





### **Disclaimers**

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