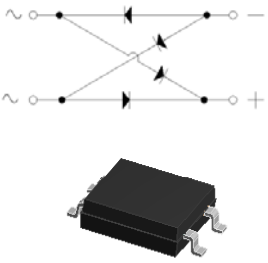
LM102 thru LM110

Low Profile Miniature Single Phase Surface Mount Bridge Rectifiers

Reverse Voltage 200~1000V Output Current 1.0A

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 s
- Low profile，Max Height 1.30mm



LPMB

Typical Applications

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	LM102	LM104	LM106	LM108	LM110	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	$Io(AV)^{(1)}$	1.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	35					A
Rating for fusing(t<8.3ms)	I^2t	5.0					A^2sec
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150					°C

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

Parameter	Test Conditions	Symbol	LM102	LM104	LM106	LM108	LM110	Unit
Maximum instantaneous forward voltage	IF=0.5 A, TA=25℃	V_F	1.0					Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25℃	I_R	5					μA
	TA=125℃		100					
Typical junction capacitance	4.0 V, 1 MHz	C_J	15					pF

Thermal Characteristics

Parameter	Symbol	LM102	LM104	LM106	LM108	LM110	Unit
Typical thermal resistance(1)	$R_{\theta JA}$	60					℃/W
	$R_{\theta JC}$	25					

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

Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)

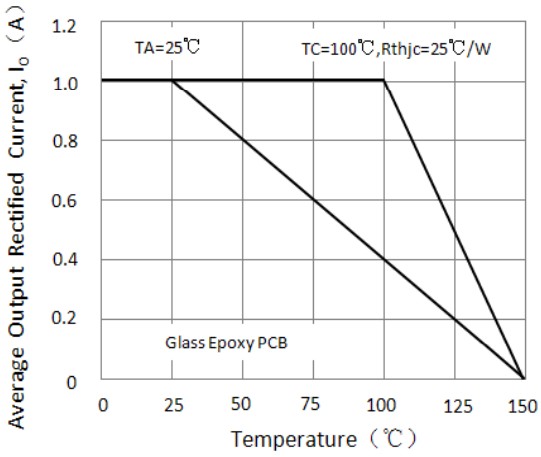


Figure 1.Output Rectifier Current Derating Curve

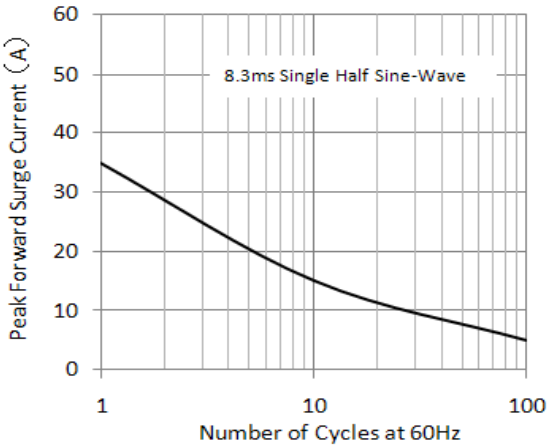


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

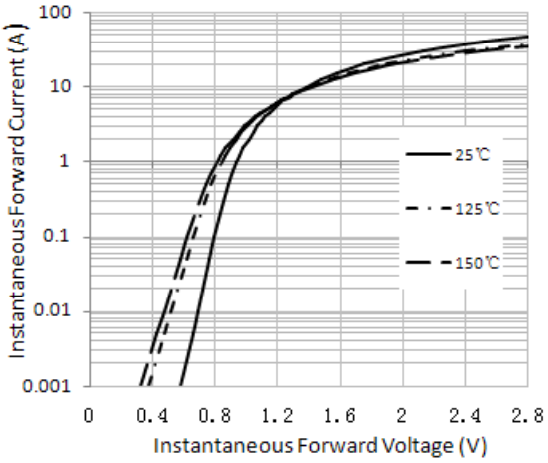


Figure 3. Typical Forward Characteristics

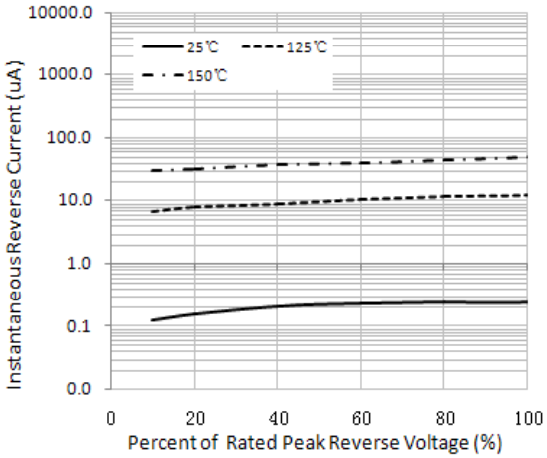
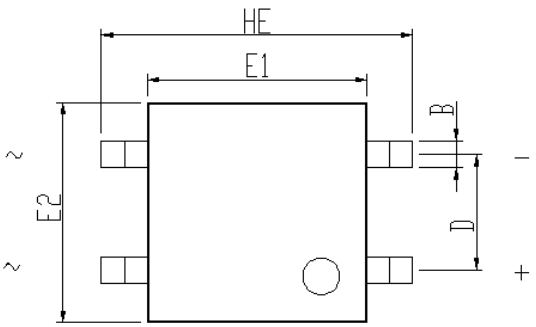
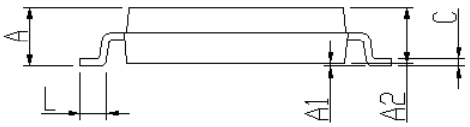


Figure 4. Typical Reverse Characteristics

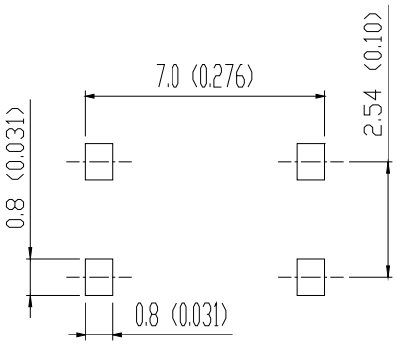
Package Outline Dimensions



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	1.2	1.3	0.047	0.051
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



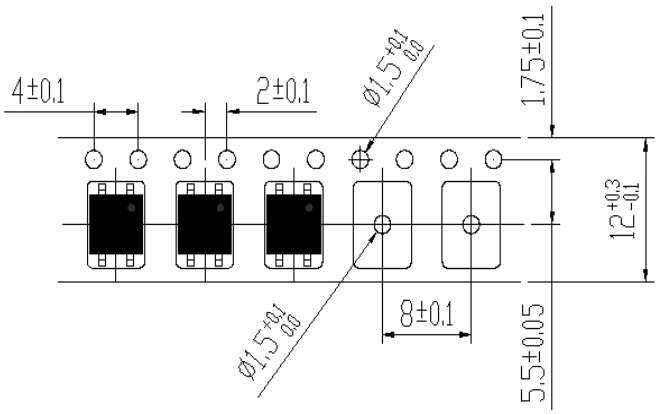
Mounting pad layout in mm(inch)



Packing Information

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

Tape & Reel Specification



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