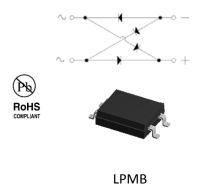


# Low Profile Miniature Single Phase Surface Mount Bridge Rectifiers Reverse Voltage 1000V Output Current 2.0A

#### **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



## **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	LM210	Unit		
Maximum repetitive peak reverse voltage	VRRM	1000	V		
Maximum RMS voltage	VRMS	700	V		
Maximum DC blocking voltage	VDC	1000	V		
Maximum average output rectified current	In(A)()	1.0 (1)	_		
	lo(AV)	2.0 (2)	Α		
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	60	А		
Rating for fusing(t<8.3ms)	l <sup>2</sup> t	15.0	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	LM210	Unit		
Maximum instantaneous forward voltage	IF=1.0 A, TA=25℃	V <sub>F</sub>	1.1	Volts		
Maximum DC reverse current at rated DC	TA=25℃		5	^		
blocking voltage	TA=125℃	I <sub>R</sub>	100	μA		
Typical junction capacitance	4.0 V, 1 MHz	CJ	15	pF		

Thermal Characteristics				
Parameter	Symbol	LM210	Unit	
Typical thermal resistance	R <sub>eJA</sub> <sup>(1)</sup>	50		
	$R_{\theta JA}^{(2)}$	45	°C/W	
	R <sub>eJC</sub> <sup>(1)</sup>	15		

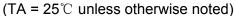
Notes: 1. On glass epoxy PCB, mounted on 1.3\*1.3mm solder pads

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<sup>2.</sup> On 20\*20mm aluminum substrate PCB with 1.3\*1.3mm solder pads



# **Ratings and Characteristics Curves**



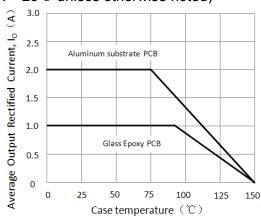


Figure 1.Output Rectifier Current Derating Curve

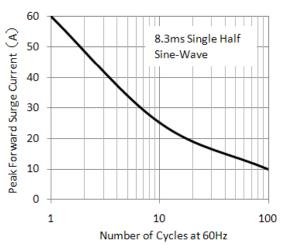


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

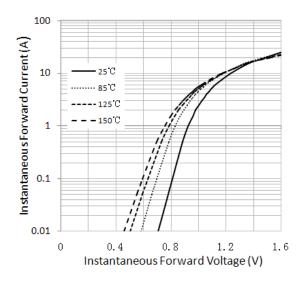


Figure 3. Typical Forward Characteristics

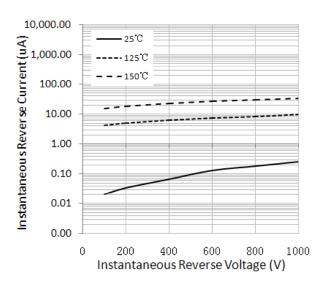
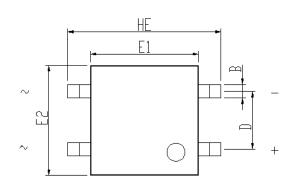


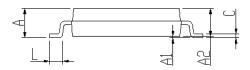
Figure 4. Typical Reverse Characteristics

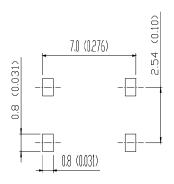
# **Package Outline Dimensions**



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
Α	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)



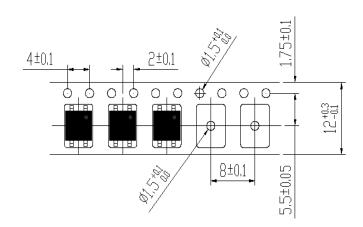


# **Packing Information**

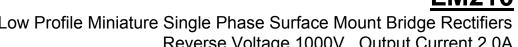
Packing quantities:

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

**Tape & Reel Specification** 



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