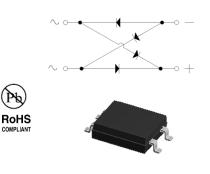


Low Profile Surface Mount Schottky Bridge Rectifiers
Reverse Voltage 20~40V Output Current 1A

### **Features**

- Super Low VF Schottky barrier bridge rectifiers
- Low profile, Max Height 1.30mm
- Low forward voltage drop
- · Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- AEC-Q101 qualified
- High temperature soldering guaranteed: 260°C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition



**LPMB** 

## **Typical Applications**

For use of fast swiching in RF module, lighting, cellular phone, portable device, power supplies and other consumer applications.

Maximum Ratings (TA = 25 °C unless otherwise noted)								
Parameter	Symbol	LMS12	LMS13	LMS14	Unit			
Maximum repetitive peak reverse voltage	VRRM	20	30	40	V			
Maximum RMS voltage	VRMS	14	21	28	V			
Maximum DC blocking voltage	VDC	20	30	40	V			
Maximum average output rectified current	lo(AV) <sup>1)</sup>	1.0			Α			
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load	IFSM	30			А			
Operating junction temperature range	$T_J$	- 55 to + 150		°C				
Storage temperature range	T <sub>STG</sub>	- 55 to + 150			°C			

Electrical Characteristics (TA = 25 °C unless otherwise noted)								
Parameter	Test Conditions	Symbol	LMS12	LMS13	LMS14	Unit		
Maximum instantaneous forward voltage	IF=0.5A,TA=25℃	V <sub>F</sub>	0.45		•	Volts		
Maximum DC reverse current at rated DC blocking voltage	TA=25°C		200			uA		
	TA=125°C	I <sub>R</sub>	30			mA		
Typical junction capacitance	4.0 V, 1 MHz	CJ	71			pF		
Typical thermal resistance <sup>1)</sup>	juntion to ambient	$R_{\theta JA}$	40		°C/W			
	juntion to case	$R_{ heta JC}$	20					

Notes:

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



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## Ratings and Characteristics Curves

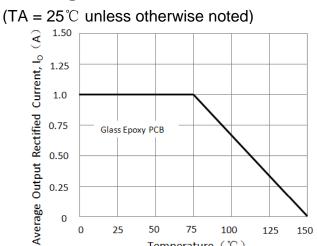


Figure 1.Output Rectifier Current Derating Curve

Temperature (°C)

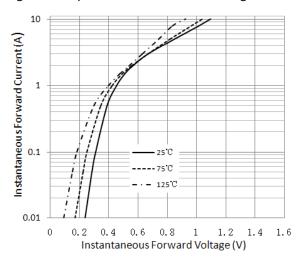


Figure 3. Typical Instantaneous Forward Characteristics

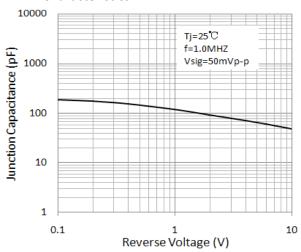


Figure 5. Typical Junction Capacitance

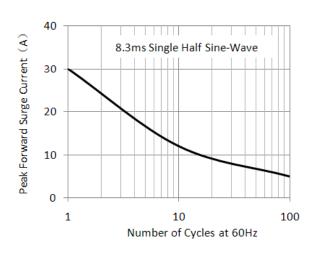


Figure 2.Maximum Non-Repetitive Peak **Forward Surge Current** 

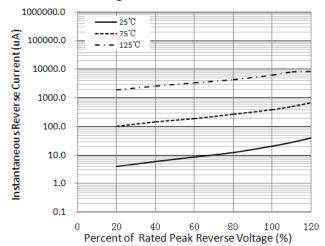
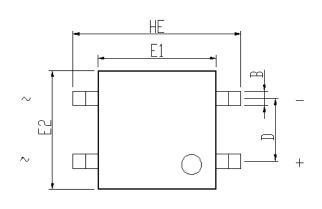


Figure 4. Typical Reverse Characteristics



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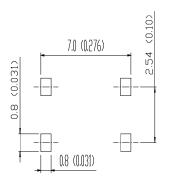
## Package Outline Dimensions



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)



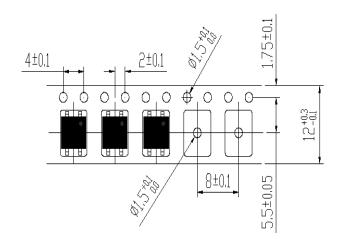


## Packing Information

#### Packing quantities:

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

#### **Tape & Reel Specification**





Low Profile Surface Mount Schottky Bridge Rectifiers Reverse Voltage 20~40V Output Current 1A

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