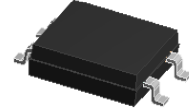
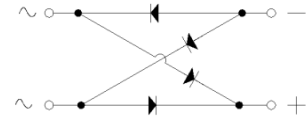


### Features

- 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	Io(AV) <sup>1)</sup>	1.0			A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	30			A
Operating junction temperature range	T <sub>J</sub>	- 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°C	V <sub>F</sub>	0.45			Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I <sub>R</sub>	200			uA
	TA=125°C		30			mA
Typical junction capacitance	4.0 V, 1 MHz	C <sub>J</sub>	71			pF
Typical thermal resistance <sup>1)</sup>	junction to ambient	R <sub>θJA</sub>	40			°C/W
	junction to case	R <sub>θJC</sub>	20			

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



# LMS12 thru LMS14

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

## Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

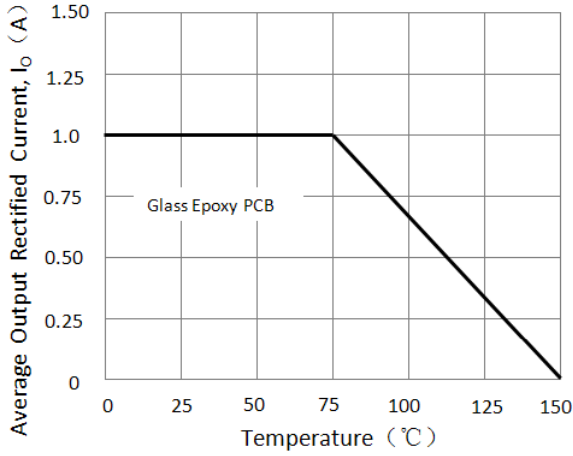


Figure 1. Output Rectifier Current Derating Curve

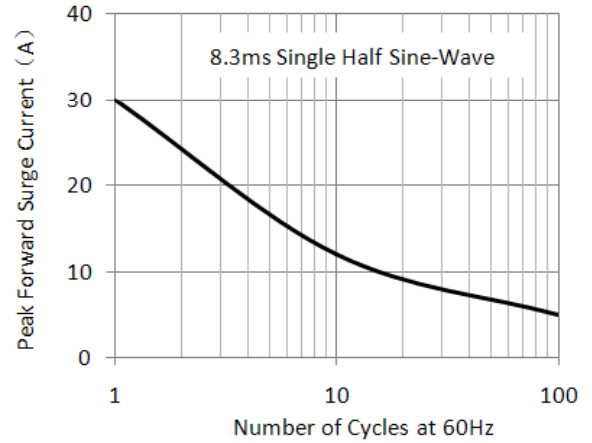


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

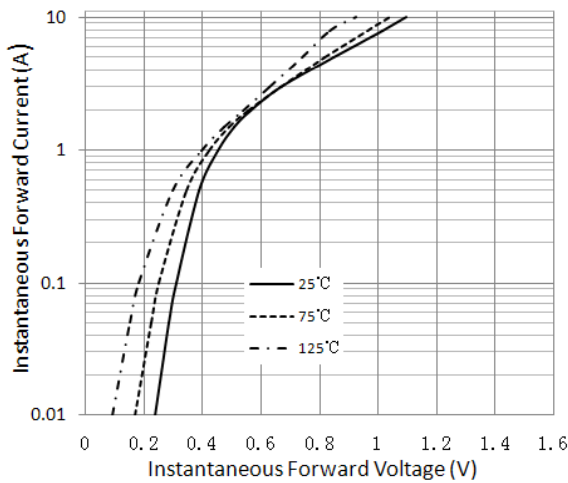


Figure 3. Typical Instantaneous Forward Characteristics

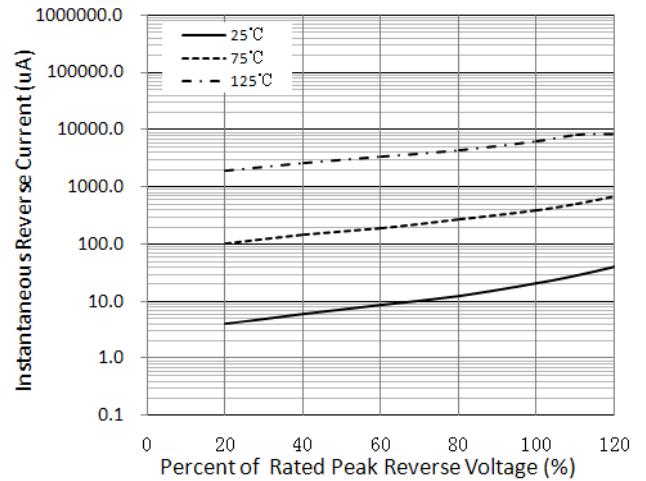


Figure 4. Typical Reverse Characteristics

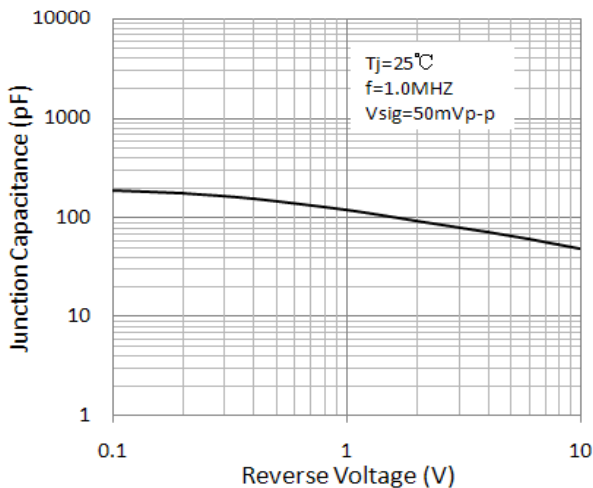
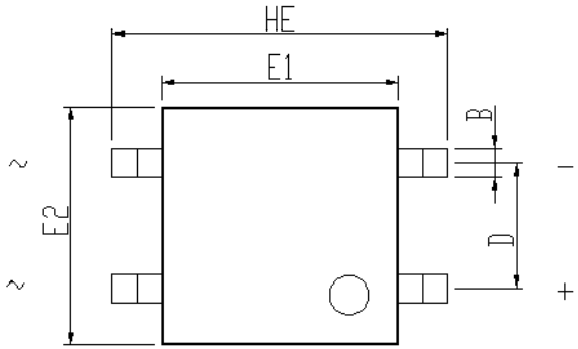


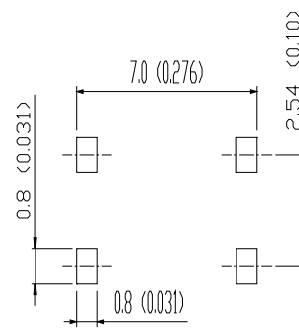
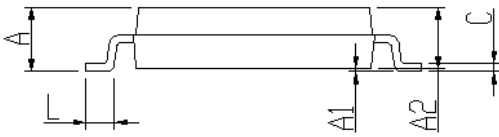
Figure 5. Typical Junction Capacitance

## 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)

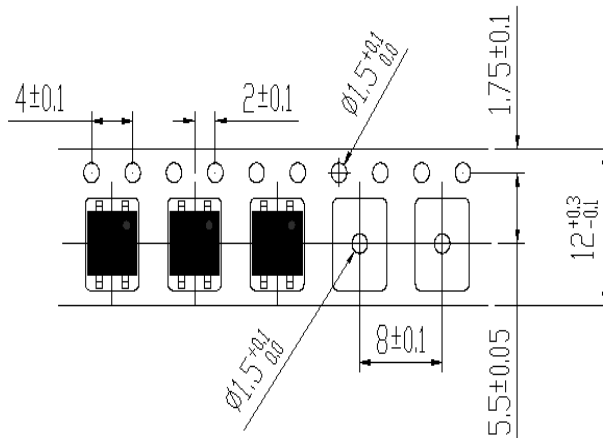


## Packing Information

### Packing quantities:

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

### Tape & Reel Specification





# LMS12 thru LMS14

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

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