LSL12 thru LSL1B

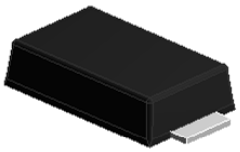
Surface Mount Schottky Rectifier

Reverse Voltage 20~100V Forward Current 1A

Features

- Schottky barrier diodes
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- Low profile， typical thickness 1.0mm
- AEC-Q101 qualified

RoHS COMPLIANT



eSGB (SMAF)

Typical Applications

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

Maximum Ratings (T_A = 25 °C unless otherwise noted)

Parameter	Symbol	LSL12	LSL13	LSL14	LSL15	LSL16	LSL18	LSL1B	Unit
Maximum repetitive peak reverse voltage	VRRM	20	30	40	50	60	80	100	V
Maximum RMS voltage	VRMS	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	VDC	20	30	40	50	60	80	100	V
Maximum average forward rectified current	IF(AV)	1.0							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	30							A
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150							°C

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

Parameter	Test Conditions	Symbol	LSL12	LSL13	LSL14	LSL15	LSL16	LSL18	LSL1B	Unit
Maximum instantaneous forward voltage	IF=1A, TA=25℃	VF	0.45			0.65		0.80		Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25℃	IR	0.5							mA
	TA=125℃		30							
Typical junction capacitance	4.0 V, 1 MHz	C_J	55							pF
Typical thermal resistance	juntion to lead	$R_{\theta JL}$ [1)]	30							℃/W

Note1:Thermal resistance from junction to lead,mounted on PCB with 0.315×0.315〃（8.0×8.0mm）copper pads

Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)

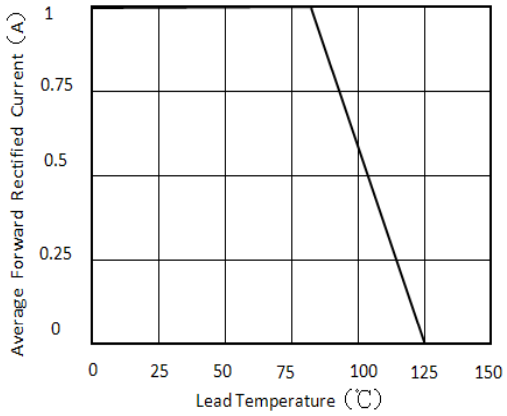


Figure 1.Forward Current Derating Curve

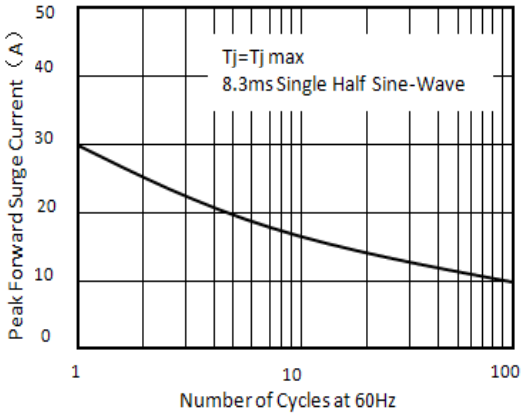


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

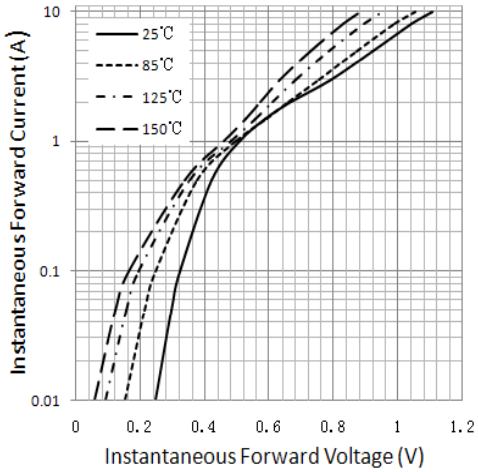


Figure 3. Typical Instantaneous Forward Characteristics

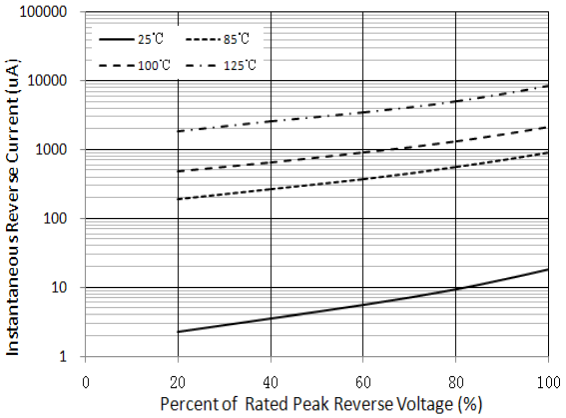
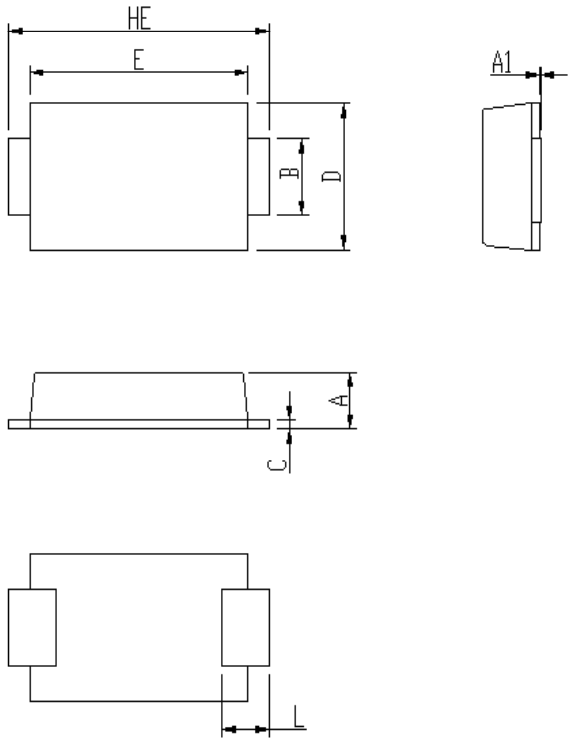


Figure 4. Typical Reverse Characteristics

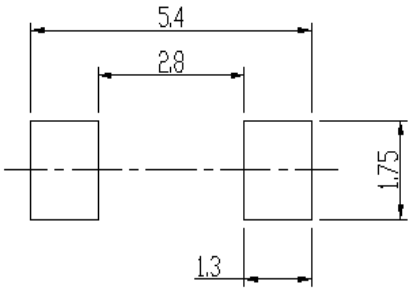
Package Outline Dimensions

in inches (millimeters)



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	0.92	1.08	0.036	0.043
A1	0	0.1	0.000	0.004
B	1.25	1.45	0.049	0.057
C	0.1	0.25	0.004	0.010
D	2.6	2.8	0.102	0.110
E	4.1	4.3	0.161	0.169
L	0.7	1.1	0.028	0.043
HE	4.8	5.2	0.189	0.205

Soldering footprint

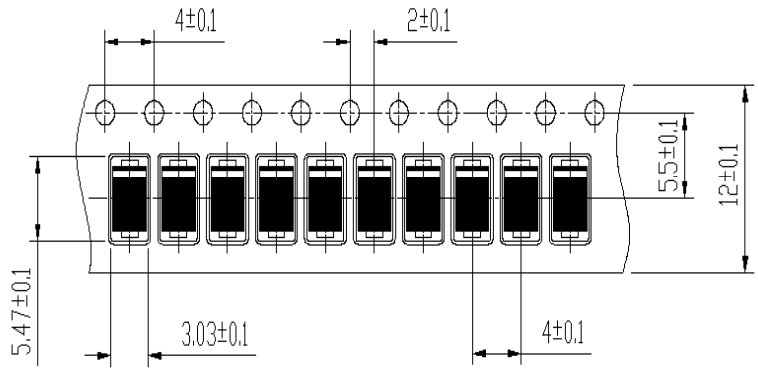


Packing Information

Packing quantities:

10,000 pcs/Reel，12mm Tape, 13" Reel

Tape & Reel Specification



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