L1A thru L7A

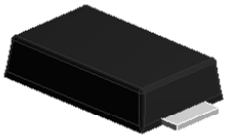
Surface Mount Glass Passivated Rectifier

Reverse Voltage 50~1000V Forward Current 1A

Features

- Glass passivated standard 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， typical thickness 1.0mm
- AEC-Q101 qualified

RoHS COMPLIANT



eSGB (SMAF)

Typical Applications

For use of general purpose rectification in lighting, cellular phone, portable device, power supplies, and other consumer applications.

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

Parameter	Symbol	L1A	L2A	L3A	L4A	L5A	L6A	L7A	Unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at TL	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 (TA = 25 °C unless otherwise noted)

Parameter	Test Conditions	Symbol	L1A	L2A	L3A	L4A	L5A	L6A	L7A	Unit
Maximum instantaneous forward	1 A	VF	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage	TA=25℃	IR	5							μA
	TA=125℃		50							
Typical reverse recovery time	I_F=0.5A,I_R=1.0A,	t_{rr}	1.8							uS
	I_{rr}=0.25A									
Typical junction capacitance	4.0 V, 1 MHz	CJ	6							pF
Typical thermal resistance[1)]	juntion to mount	$R_{\theta JM}$	10							℃/W

Note:1),The thermal resistance from junction to mount,mounted on P.C.B with 8×8mm copper pads,2 OZ,FR4 PCB

Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)

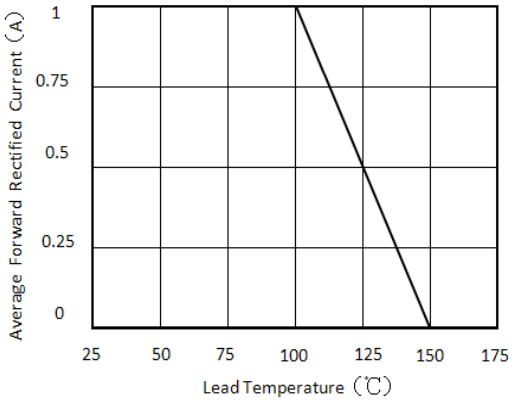


Figure 1.Forward Current Derating Curve

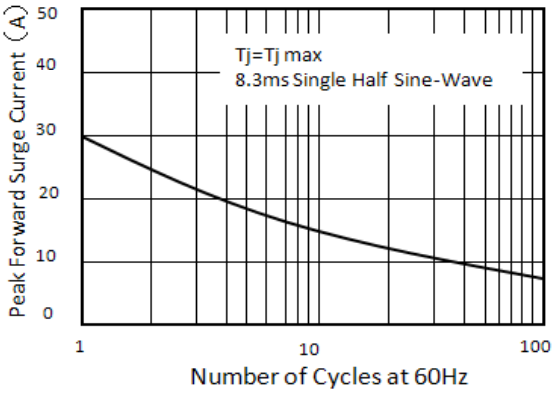


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

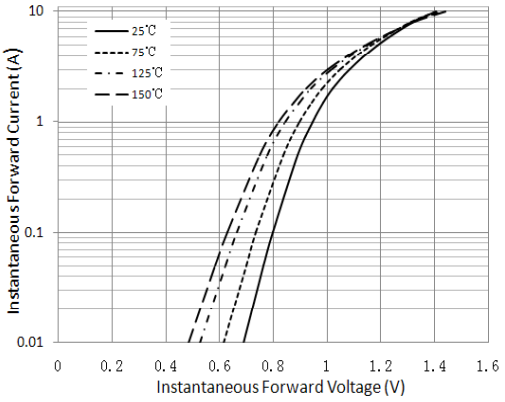


Figure 3. Typical Instantaneous Forward Characteristics

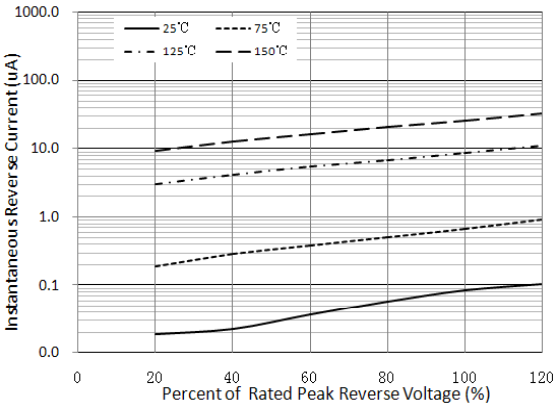
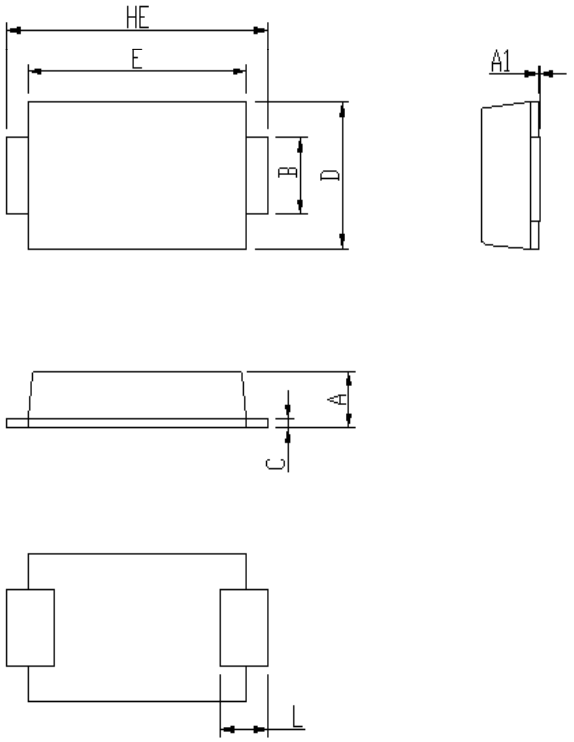


Figure 4. Typical Reverse Characteristics

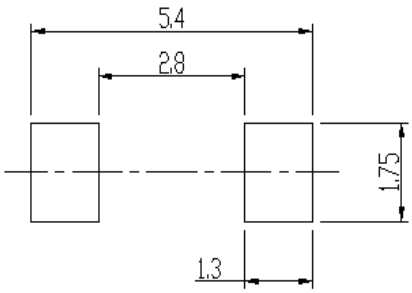
Package Outline Dimensions

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

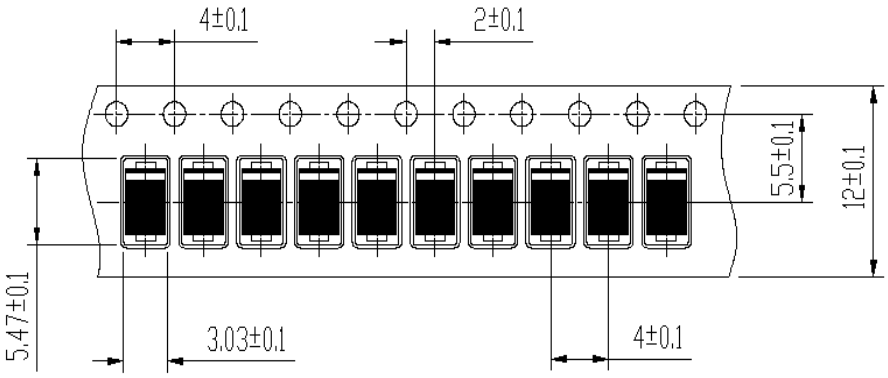


Packing Information

Packing quantities:

10,000 pcs/Reel，12mm Tape, 13" Reel

Tape & Reel Specification



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