



STEIF POWER  
TECHNOLOGY

**L1A - 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 seconds
- Low profile



Package: eSGB (SMAF)

## Applications

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



## Maximum Ratings ( $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	L1A	L2A	L3A	L4A	L5A	L6A	L7A	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_L$ (See Fig.1)	I <sub>F(AV)</sub>					1.0			A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I <sub>FSM</sub>					30			A
Operating Junction and Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>				- 55 to + 150				°C

## Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Test Conditions	Symbol	L1A	L2A	L3A	L4A	L5A	L6A	L7A	Unit
Maximum Instantaneous Forward Voltage	1 A	V <sub>F</sub>				1.1				V
Maximum DC Reverse Current at rated DC Blocking Voltage	T <sub>A</sub> =25°C	I <sub>R</sub>				5				μA
	T <sub>A</sub> =125°C					50				
Typical Reverse Recovery Time	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>R</sub> =0.25A	t <sub>rr</sub>				1.8				μs
Typical Junction Capacitance	4.0 V, 1 MHz	C <sub>J</sub>				6				pF



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## Ratings and Characteristic Curves

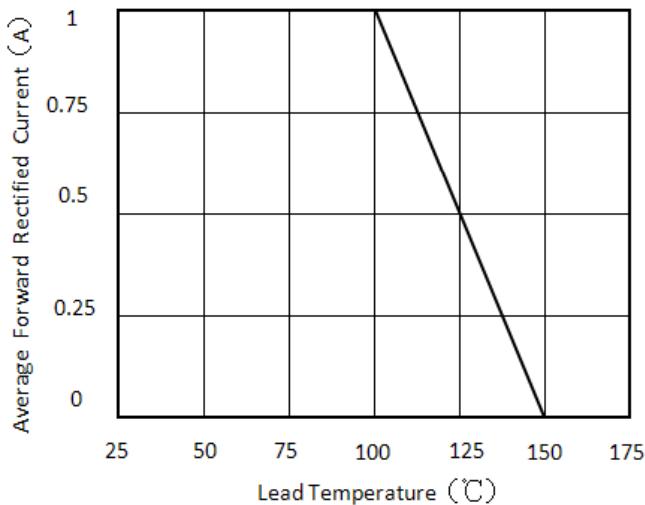


Figure 1. Forward Current Derating Curve

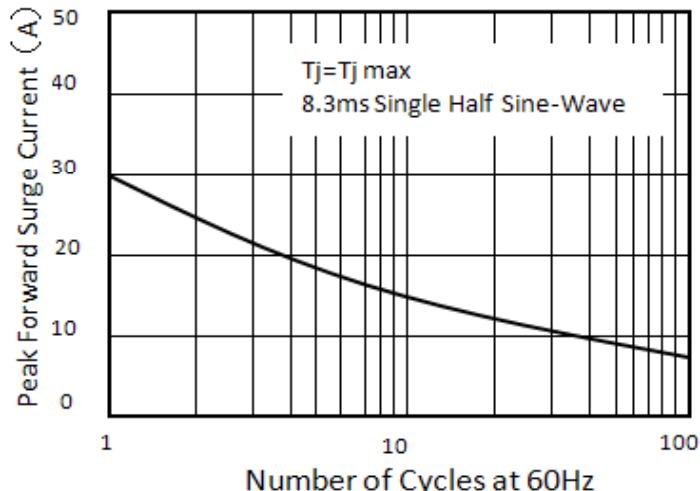


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

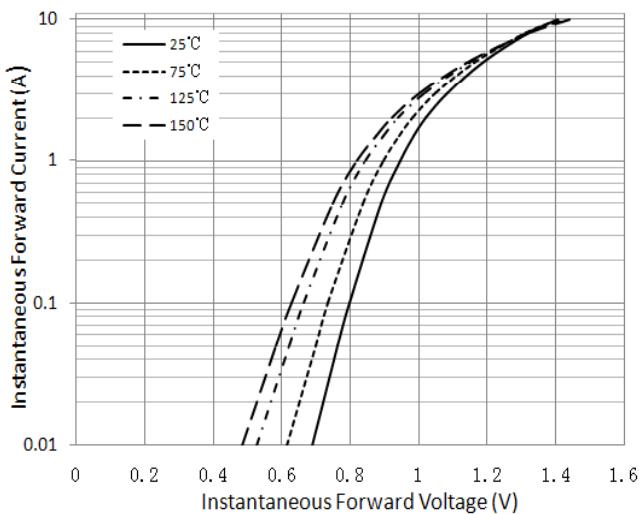


Figure 3. Typical Instantaneous Forward Characteristics

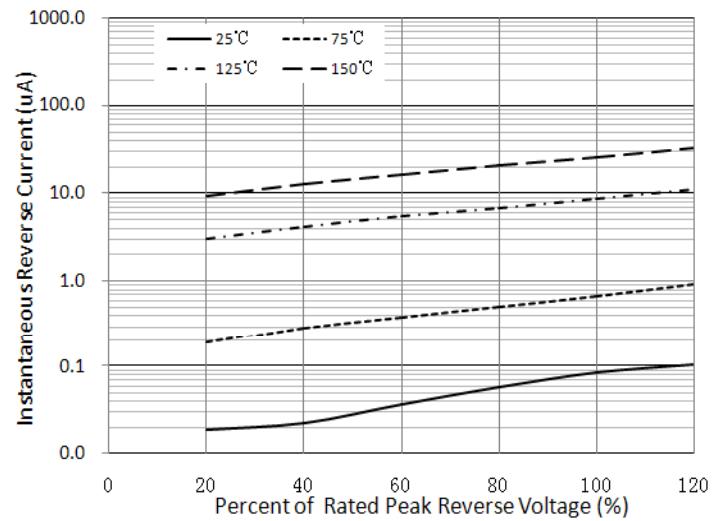


Figure 4. Typical Reverse Characteristics



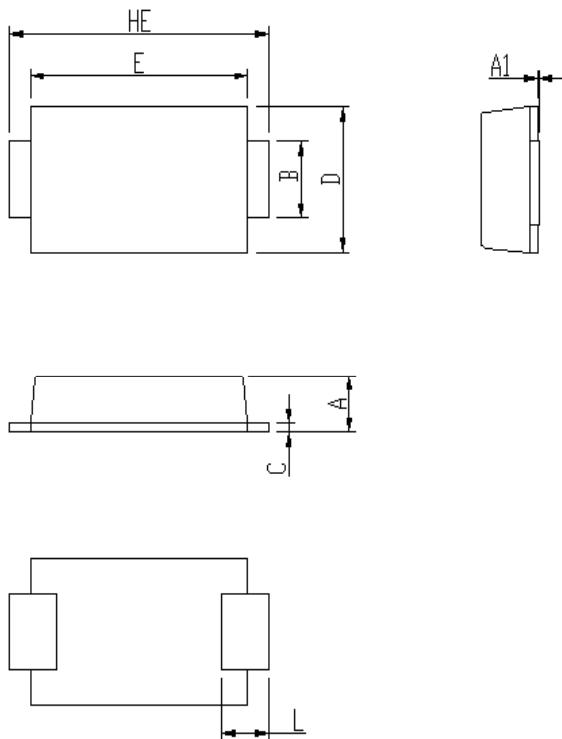
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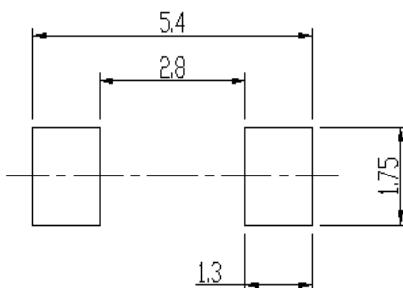
## Package Outline Dimensions

eSGB (SMAF)



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:

3000 pcs/Reel, 12mm Tape, 13" Reel

### Tape & Reel Specification

