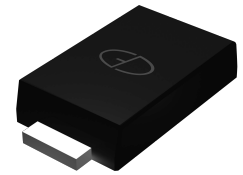


Features

- Glass passivated Superfast Recovery rectifiers
- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- AEC-Q101 qualified
- Low profile, typical thickness 1.0mm



Package: eSGB (SMAF)



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

Parameter	Symbol	LU1	LU2	LU3	LU4	LU5	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0					A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	30					A
Operating Junction and Storage Temperature Range	T_J, T_{STG}	- 55 to + 150					°C

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

Parameter	Test Conditions	Symbol	LU1	LU2	LU3	LU4	LU5	Unit
Maximum Instantaneous Forward Voltage	1 A	V_F	1.0			1.3	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	I_R	5					μA
	$T_A=125^\circ\text{C}$		50					
Typical Reverse Recovery Time	$I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$	t_{rr}	35					nS
Typical Junction Capacitance	4.0 V, 1 MHz	C_J	10					pF
Typical Thermal Resistance ¹⁾	Junction to Ambient	$R_{\theta JA}$	66					°C/W
	Junction to Case	$R_{\theta JC}$	32					
	Junction to mount	$R_{\theta JM}$	1					

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

Ratings and Characteristics Curves

($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

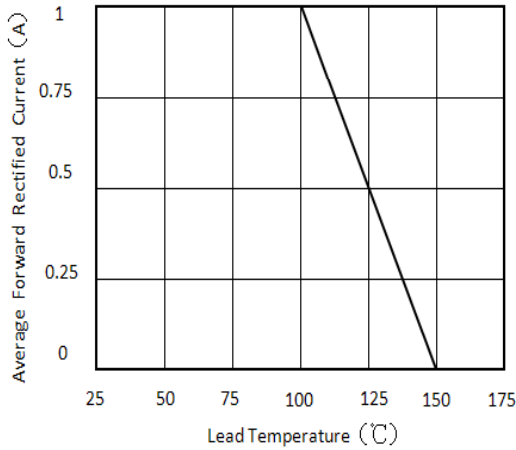


Figure 1. Forward Current Derating Curve

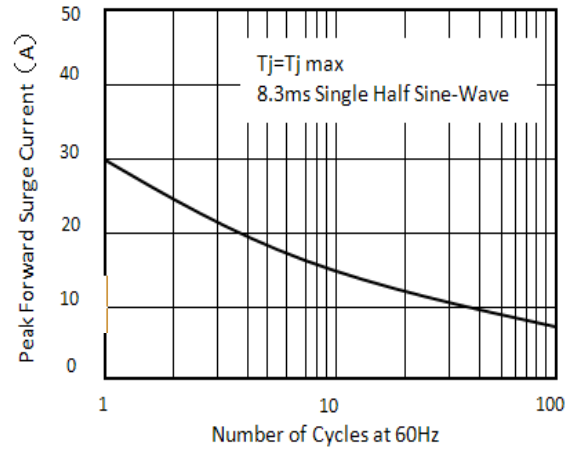


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

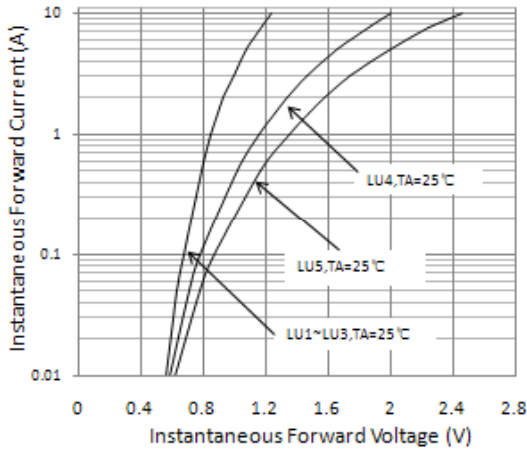


Figure 3. Typical Instantaneous Forward Characteristics

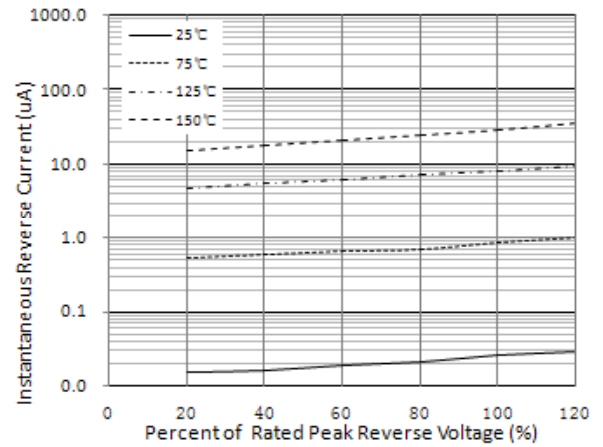
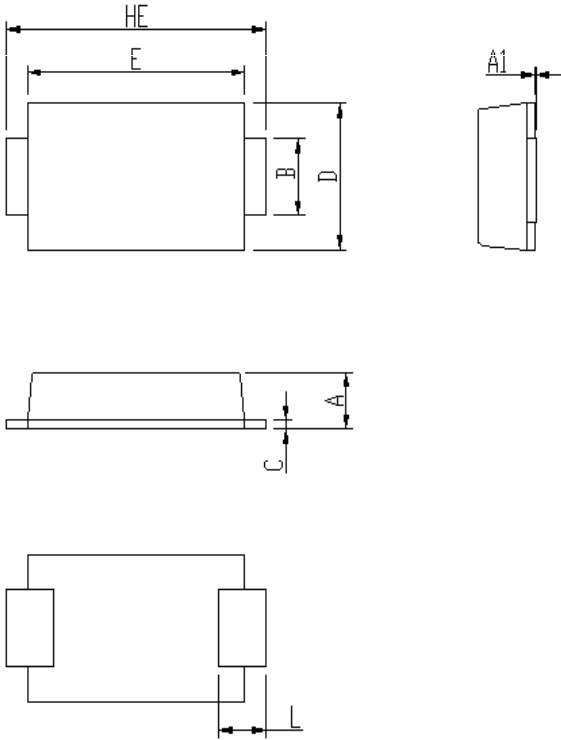


Figure 4. Typical Reverse Characteristics

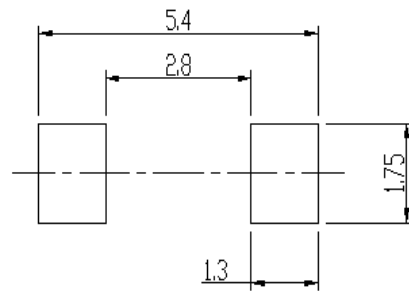
Package Outline Dimensions

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

