

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)



RoHS
COMPLIANT

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°C	I _R			5			µA
	T _A =125°C				50			
Typical Reverse Recovery Time	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	t _{rr}			35			nS
Typical Junction Capacitance	4.0 V, 1 MHz	C _J			10			pF
Typical Thermal Resistance ¹⁾	Junction to Ambient	R _{θJA}			66			°C/W
	Junction to Case	R _{θJC}			32			
	Junction to mount	R _{θJM}			1			

Note:1)The thermal resistance from junction to ambient,case or mount,mounted on P.C.B with 8x8mm copper pads,2 OZ,FR4 PCB

Ratings and Characteristics Curves

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

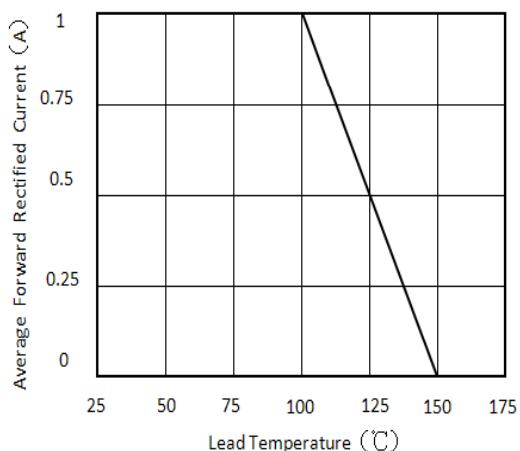


Figure 1. Forward Current Derating Curve

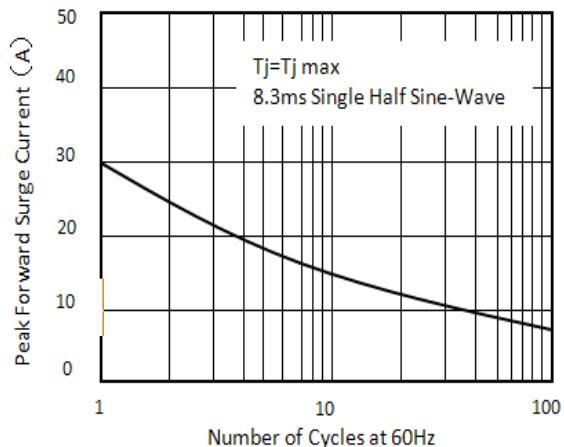


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

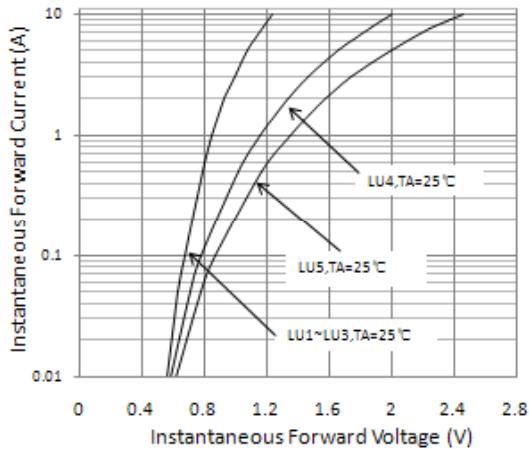


Figure 3. Typical Instantaneous Forward Characteristics

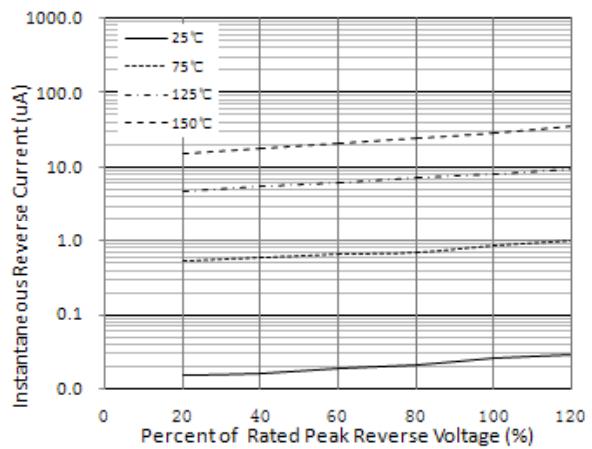
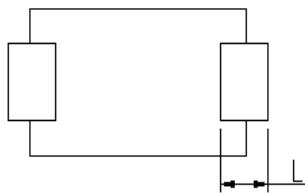
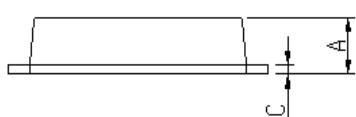
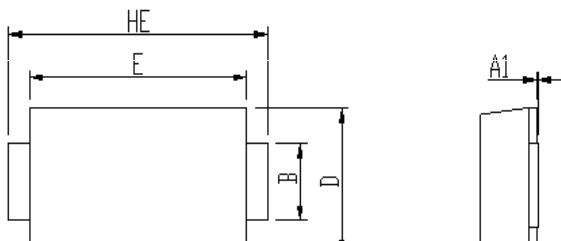


Figure 4. Typical Reverse Characteristics

Surface Mount Glass Passivated Superfast Recovery
 Rectifier Reverse Voltage 50V-600V Forward Current 1A

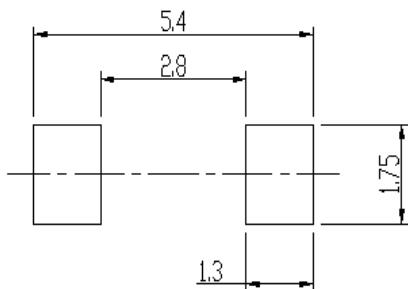
Package Outline Dimensions

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

