

Features

- Glass passivated superfast recovery rectifier
- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-02
- Low profile, typical thickness 1.0mm



eSGB (SMAF)



RoHS
COMPLIANT

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

Parameter	Symbol	GSL2U1	GSL2U2	GSL2U3	GSL2U4	GSL2U5	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	$I_{F(AV)}$			2.0			A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}			50			A
Operating Junction and Storage Temperature Range	T_J, T_{STG}		- 55 to + 150				$^\circ\text{C}$

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

Parameter	Test Conditions	Symbol	GSL2U1	GSL2U2	GSL2U3	GSL2U4	GSL2U5	Unit
Maximum Instantaneous Forward	2A	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	4.0V, 1MHz	C_J			15			pF
Typical Thermal Resistance ¹	Junction to Ambient	$R_{\theta JA}$			70			$^\circ\text{C/W}$
	Junction to Mount	$R_{\theta JM}$			20			

Note:

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

GSL2U1 thru GSL2U5

Super Fast Recovery Rectifiers
 Reverse Voltage 50V-600V Forward Current 2A

Typical Characteristics Curves

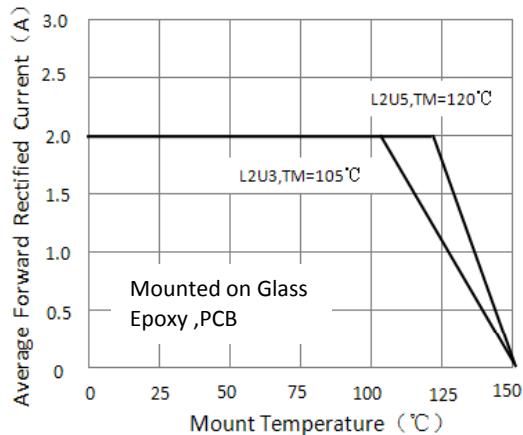


Figure 1. Forward Current Derating Curve

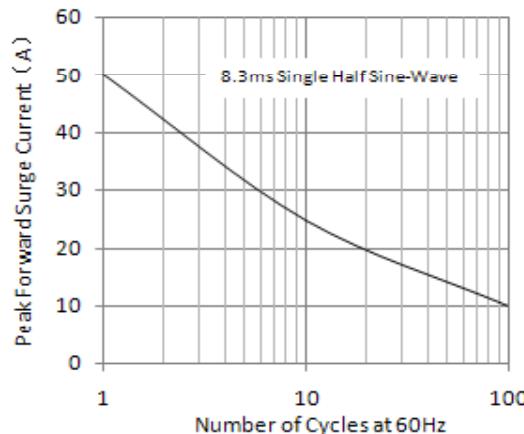


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

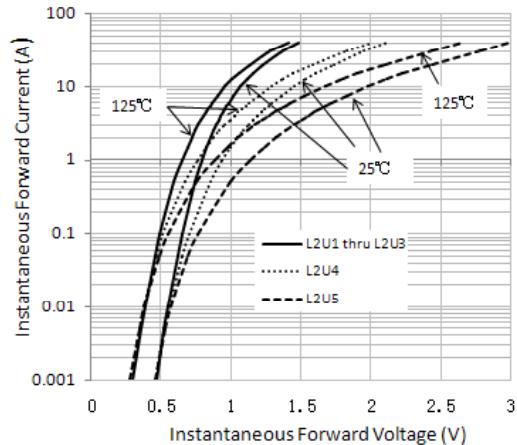


Figure 3. Typical Instantaneous Forward Characteristics

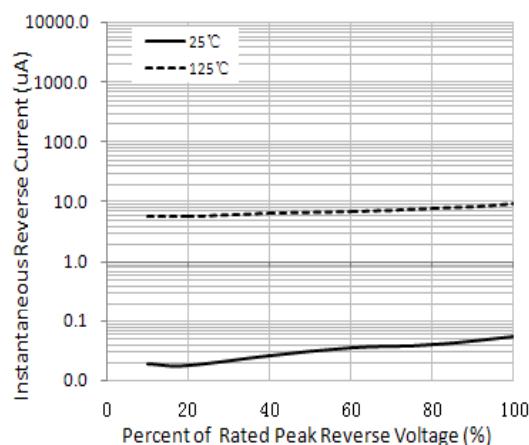


Figure 4. Typical Reverse Characteristics

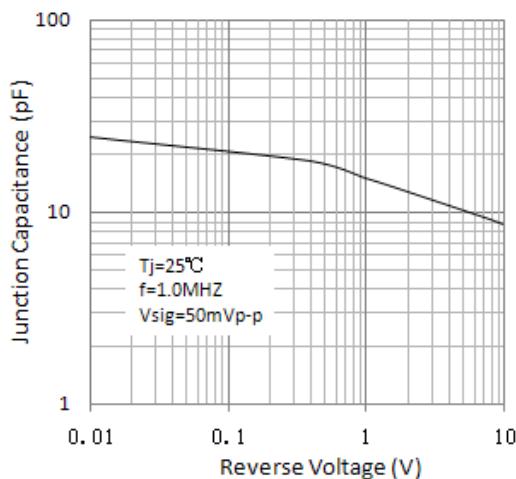
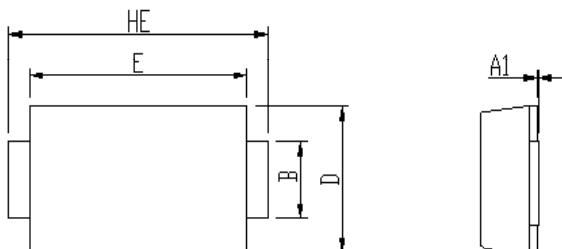
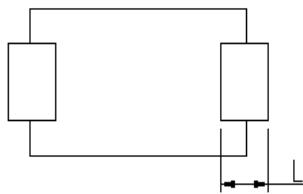
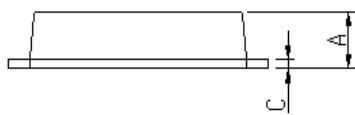


Figure 5. Typical Junction Capacitance

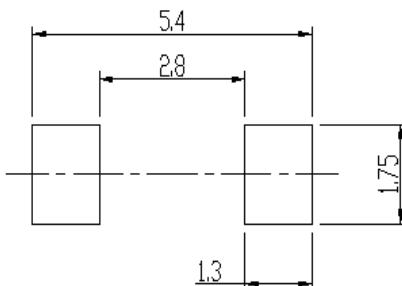
Package Outline Dimensions eSGB (SMAF)



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:

10,000 pcs/Reel, 12mm Tape, 13" Reel

Tape & Reel Specification

