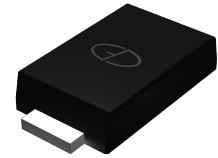


Features

- Glass passivated superfast recovery rectifier
- Ideal for automated placement
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-02
AEC-Q101 qualified
- Low profile, typical thickness 1.0mm



eSGB (SMAF)



Absolute Maximum Ratings (T_A=25°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					°C

Electrical Characteristics (T_A=25°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°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	4.0V, 1MHz	C _J	15					pF
Typical Thermal Resistance ¹	Junction to Ambient	R _{θJA}	70					°C/W
	Junction to Mount	R _{θJM}	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

Typical Characteristics Curves

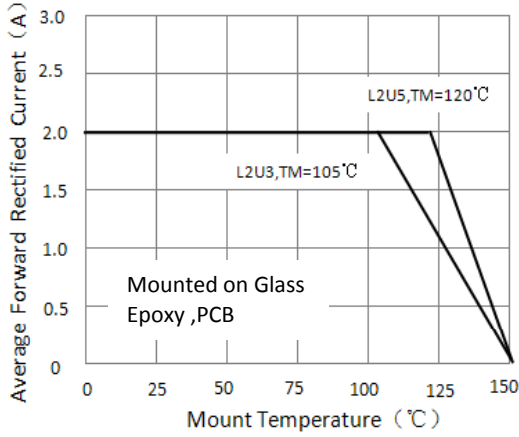


Figure 1. Forward Current Derating Curve

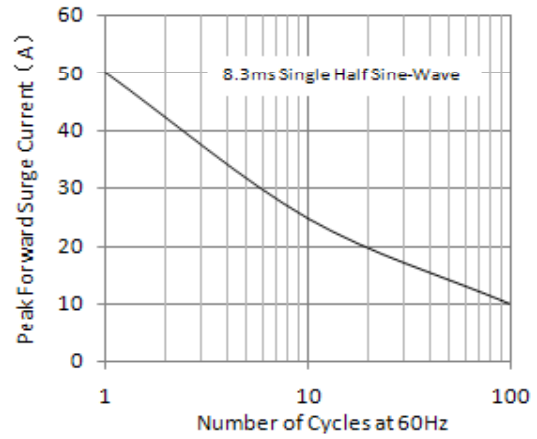


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

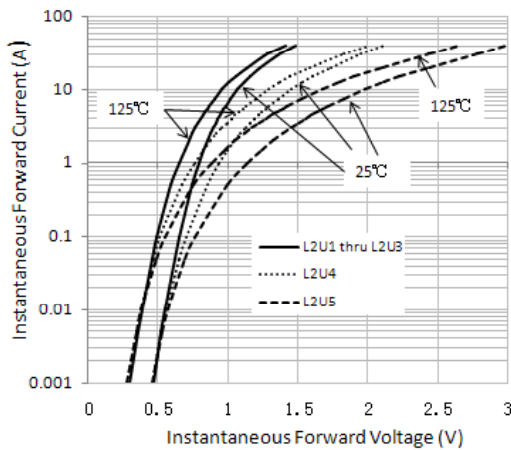


Figure 3. Typical Instantaneous Forward Characteristics

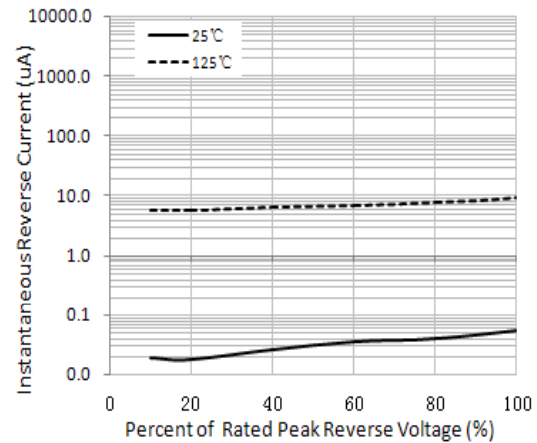


Figure 4. Typical Reverse Characteristics

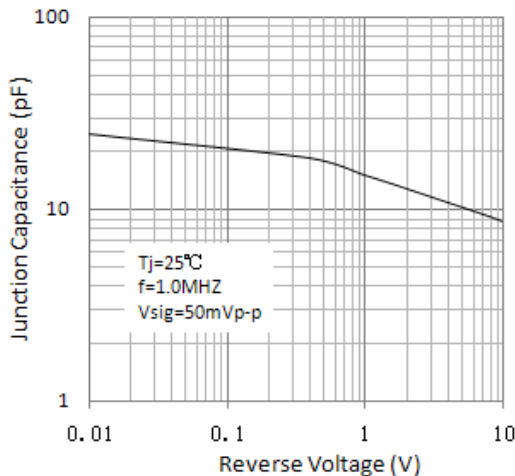


Figure 5. Typical Junction Capacitance

