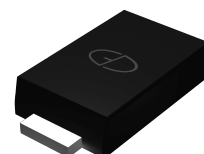


Features

- Schottky barrier diodes
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10s
- Low profile, typical thickness 1.0mm
- AEC-Q101 qualified



Package: eSGB(SMAF)



Applications

- For use in low voltage,high frequency inverters,free wheeling, and polarity protection application

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	60	V
Maximum RMS Voltage	V _{RMS}	42	V
Maximum DC Blocking Voltage	V _{DC}	60	V
Maximum Average Forward Rectified Current	I _{F(AV)} ¹⁾	3.0	A
	I _{F(AV)} ²⁾	5.0	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	150	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	Value	Unit
Instantaneous Forward Voltage	I _F =1A, T _A =25°C	V _F	Max:0.50	V
	I _F =5A, T _A =25°C		Max:0.65	
	I _F =5A, T _A =125°C		Typ:0.60	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	0.5	mA
	T _A =125°C		20	
Typical Junction Capacitance	4.0V, 1 MHz	C _J	220	pF
Typical Thermal Resistance ²⁾	Juntion to Ambient	R _{θJA}	45	°C/W
	Juntion to Case	R _{θJC}	25	
	Juntion to Lead	R _{θJL}	20	

Notes: 1) Mounted on pcb with 8.0×8.0mm copper pads

2) The thermal resistance from junction to ambient,case or lead ,mounted on pcb with 30.0×30.0mm copper pads

Typical Characteristics Curves

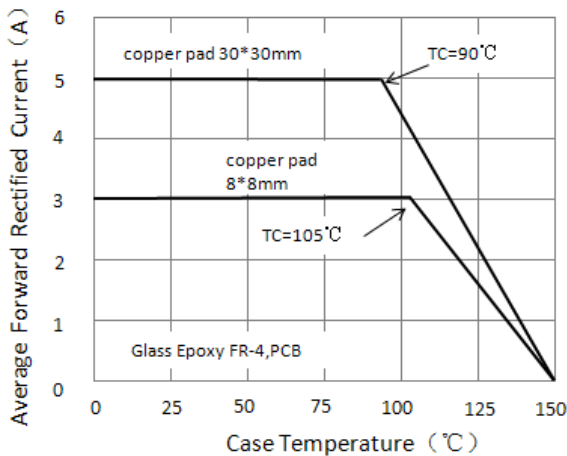


Figure 1. Forward Current Derating Curve

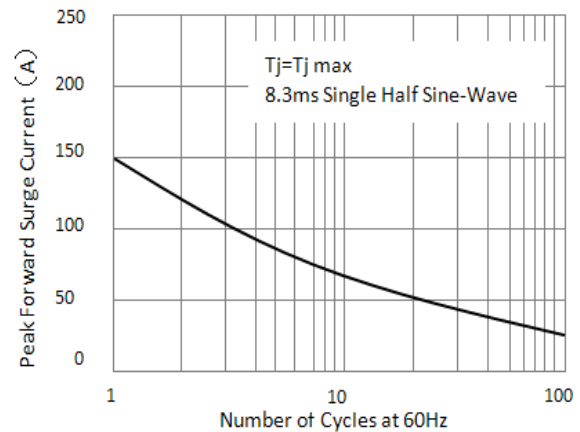


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

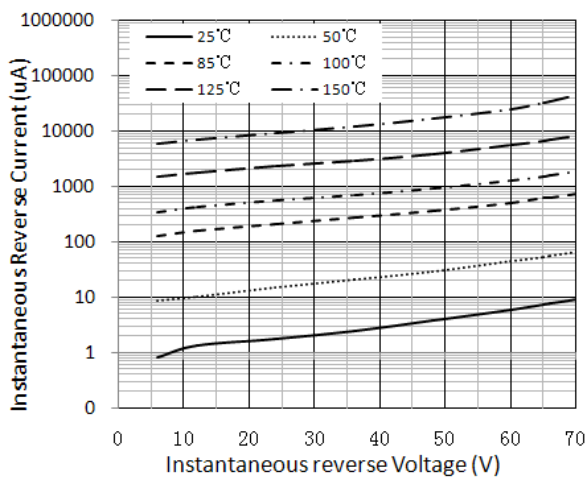


Figure 3. Typical Reverse Characteristics

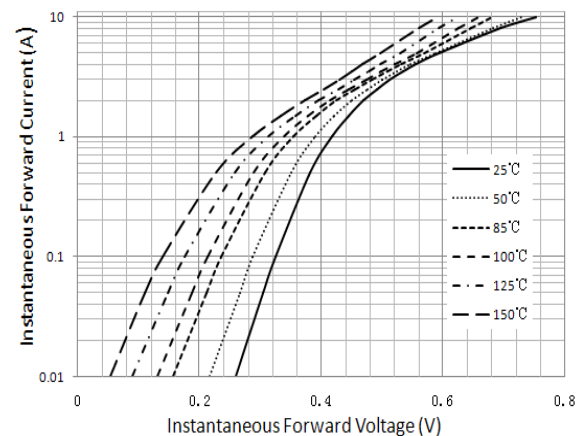


Figure 4. Typical Instantaneous Forward Characteristics

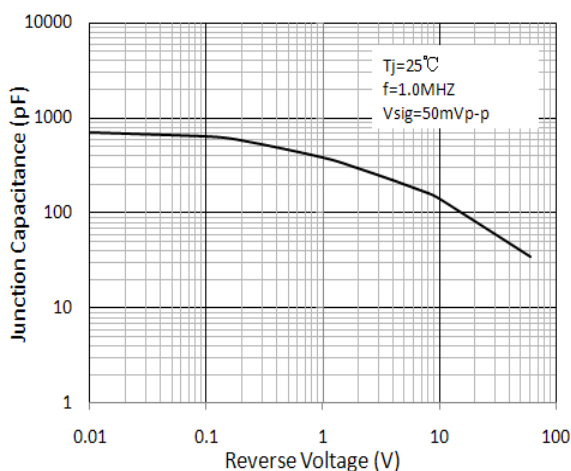
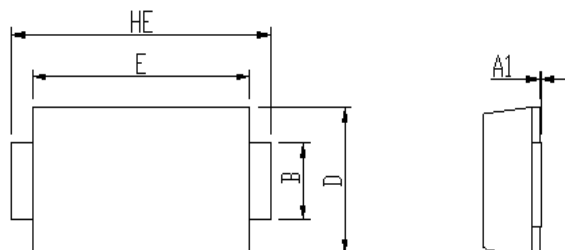
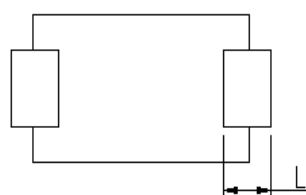
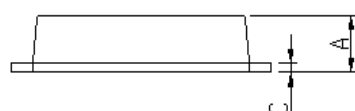


Figure 5. Typical Junction Capacitance

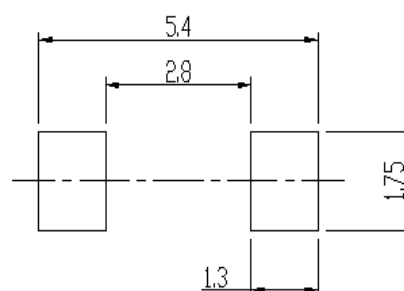
Package Outline Dimensions



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	0.8	1.0	0.031	0.039
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

