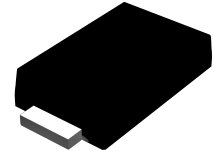


## Features

- 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<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	65	V
Maximum RMS Voltage	V <sub>RMS</sub>	45.5	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	65	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub> <sup>1)</sup>	3.0	A
	I <sub>F(AV)</sub> <sup>2)</sup>	5.0	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	150	A
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150	°C

## Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Test Conditions	Symbol	Value	Unit
Instantaneous Forward Voltage	I <sub>F</sub> =1A, T <sub>A</sub> =25°C	V <sub>F</sub>	Max:0.50	V
	I <sub>F</sub> =5A, T <sub>A</sub> =25°C		Max:0.65	
	I <sub>F</sub> =5A, T <sub>A</sub> =125°C		Typ:0.60	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>A</sub> =25°C	I <sub>R</sub>	0.5	mA
	T <sub>A</sub> =125°C		20	
Typical Junction Capacitance	4.0V, 1 MHz	C <sub>J</sub>	220	pF
Typical Thermal Resistance <sup>2)</sup>	Junction to Ambient	R <sub>θJA</sub>	45	°C/W
	Junction to Case	R <sub>θJC</sub>	25	
	Junction to Lead	R <sub>θJL</sub>	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

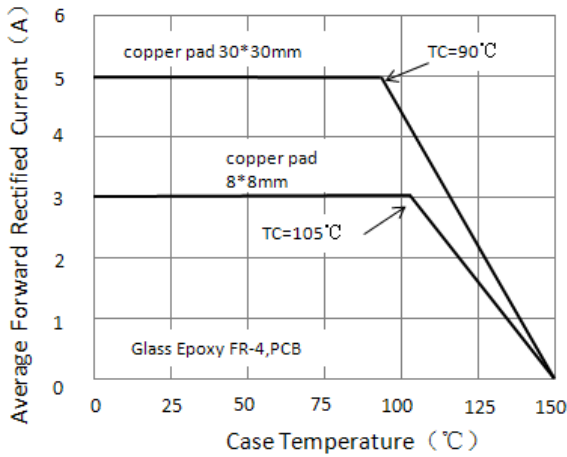


Figure 1. Forward Current Derating Curve

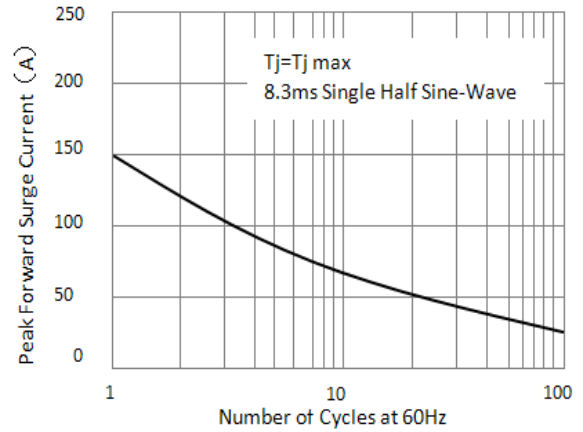


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

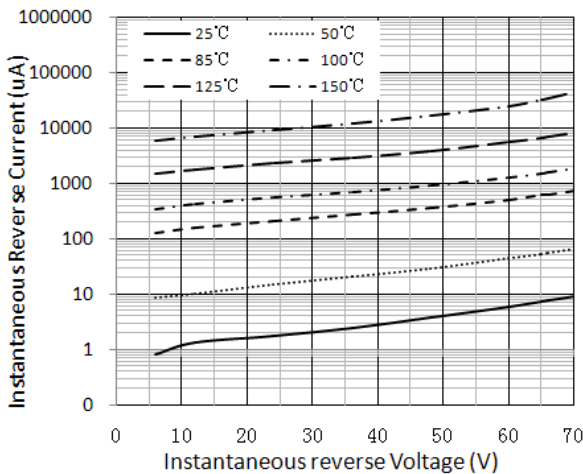


Figure 3. Typical Reverse Characteristics

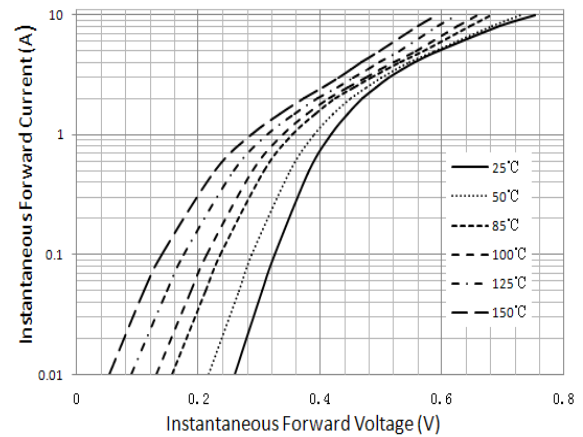


Figure 4. Typical Instantaneous Forward Characteristics

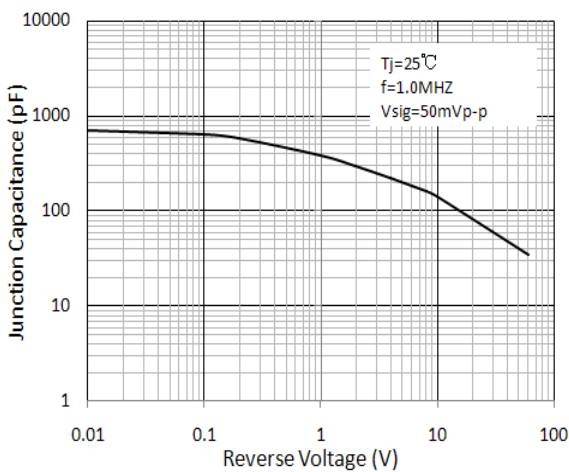
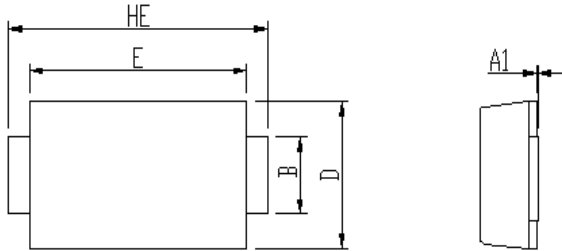
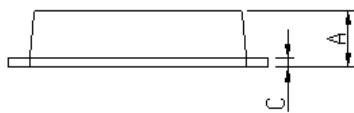


Figure 5. Typical Junction Capacitance

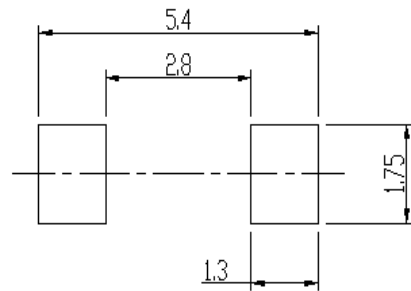
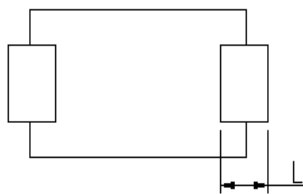
## Package Outline Dimensions



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

