

Features

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



eSGB (SMAF)

Typical Applications

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

Maximum Ratings (TA = 25 °C unless otherwise noted)				
Parameter	Symbol	LSL36		Unit
Maximum repetitive peak reverse voltage	VRRM	60		V
Maximum RMS voltage	VRMS	42		V
Maximum DC blocking voltage	VDC	60		V
Maximum average forward rectified current at TL (See Fig.1)	IF(AV)	3.0		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	100		A
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 125		°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)						
Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Instantaneous forward voltage	IF=1A, TA=25°C	VF	-	0.42	0.45	Volts
	IF=2A, TA=25°C		-	0.47	0.50	
	IF=3A, TA=25°C		-	0.51	0.55	
	IF=3A, TA=100°C		-	0.46	-	
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	IR	5			mA
	TA=100°C		100			
Typical junction capacitance	4.0 V, 1 MHz	C _J	1320			pF
Typical thermal resistance ¹⁾	junction to lead	R _{θJL}	30			°C/W

Note1: Thermal resistance from junction to lead, mounted on PCB with 8.0×8.0mm copper pads

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

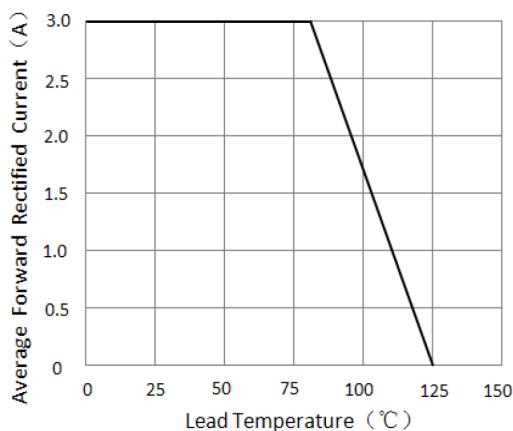


Figure 1. Forward Current Derating Curve

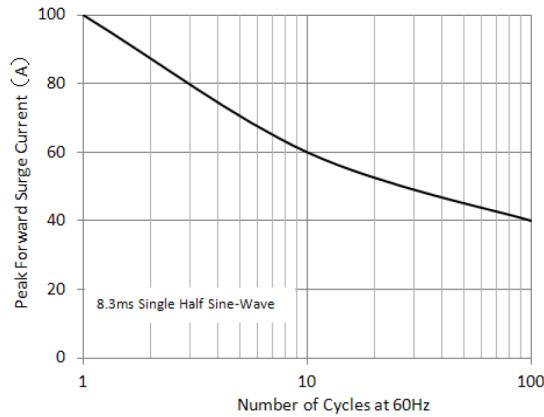


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

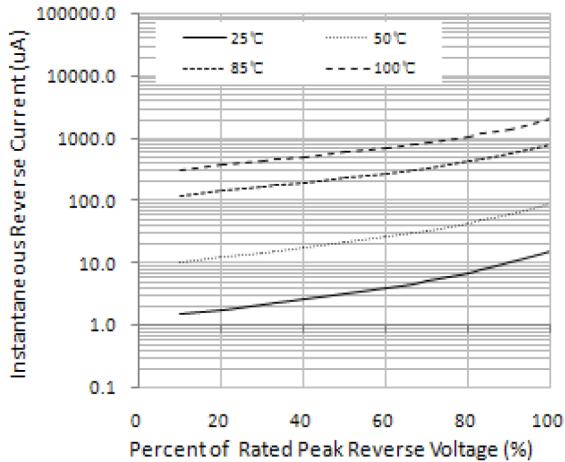


Figure 3. Typical Reverse Characteristics

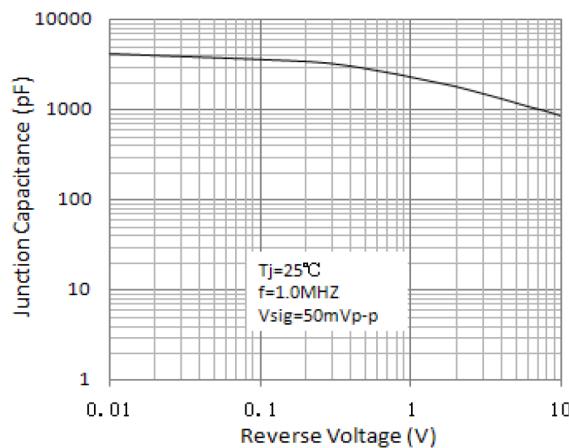


Figure 4. Typical Junction Capacitance

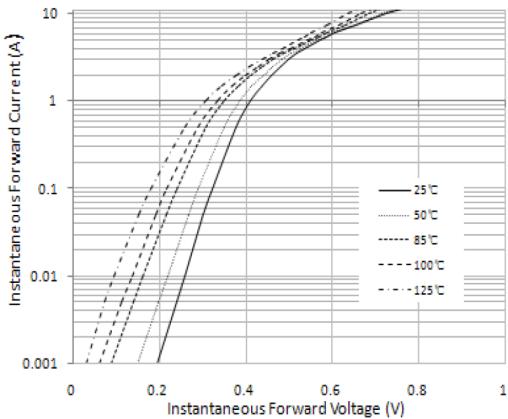
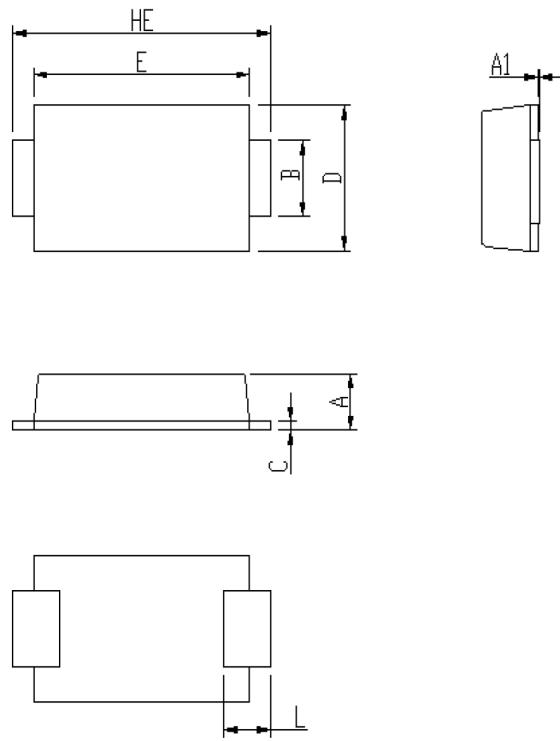
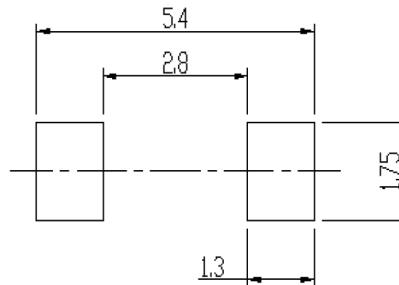


Figure 5. Typical Instantaneous Forward Characteristics

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	0.7	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