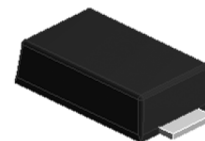


Features

- 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	LS56	LS565	Unit
Maximum repetitive peak reverse voltage	VRRM	60	65	V
Maximum RMS voltage	VRMS	42	45.5	V
Maximum DC blocking voltage	VDC	60	65	V
Maximum average forward rectified current	IF(AV) ¹⁾	3.0		A
	IF(AV) ²⁾	5.0		
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	150		A
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150		°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)					
Parameter	Test Conditions	Symbol	LS56	LS565	Unit
Instantaneous forward voltage	IF=1A, TA=25°C	VF	Max:0.50		Volts
	IF=5A, TA=25°C		Max:0.65		
	IF=5A, TA=125°C		Typ:0.60		
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	IR	0.5		mA
	TA=125°C		20		
Typical junction capacitance	4.0 V, 1 MHz	CJ	220		pF
Typical thermal resistance ²⁾	junction to ambient	RθJA	45		°C/W
	junction to case	RθJC	25		
	junction to lead	RθJL	20		

Note1,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

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

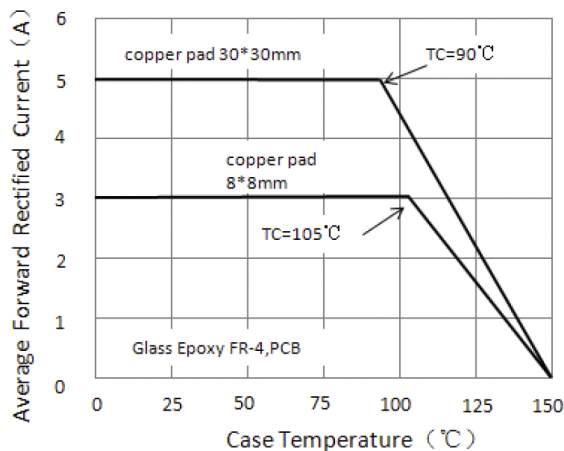


Figure 1. Forward Current Derating Curve

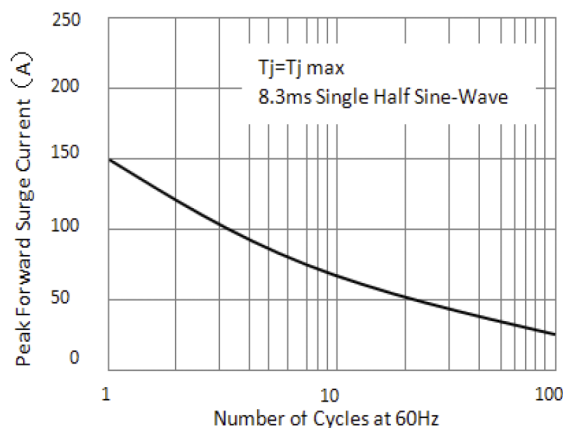


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

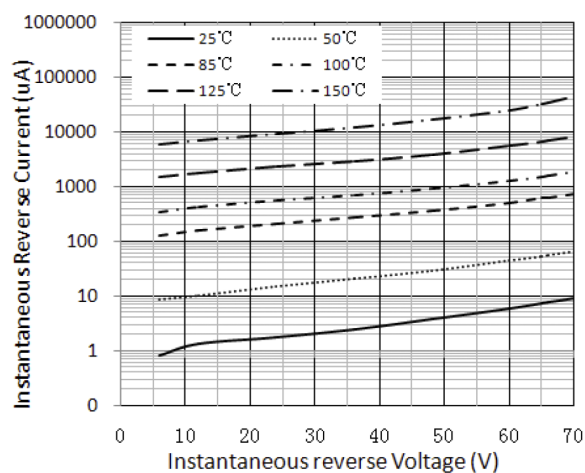


Figure 3. Typical Reverse Characteristics

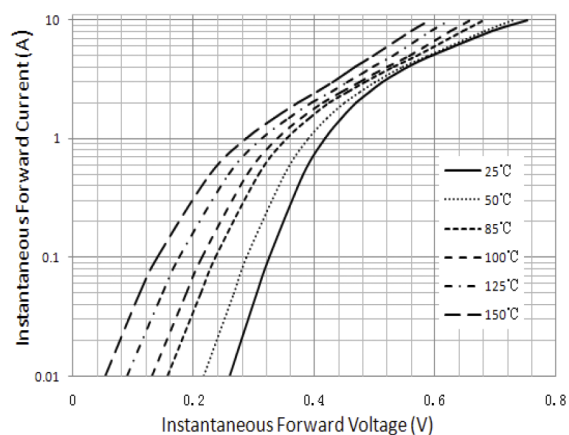


Figure 4. Typical Instantaneous Forward Characteristics

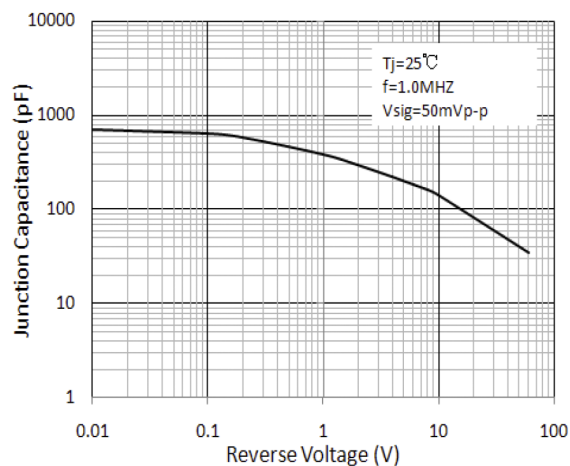
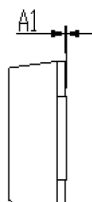
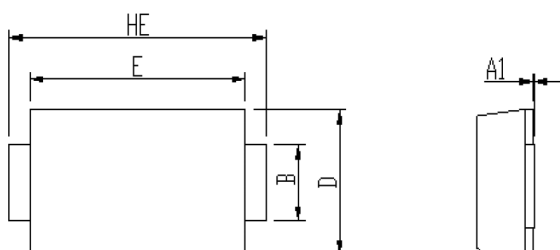
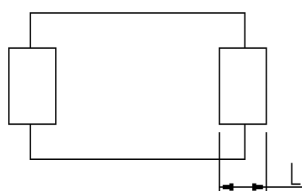
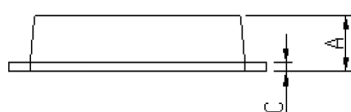


Figure 5. Typical Junction Capacitance

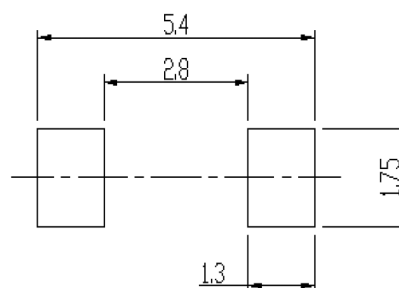
Package Outline Dimensions



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:

Reel size	Quantity/reel	Quantity/inner Box	Quantity/Carton
7"	3K	21K	84K
13"	10K	20K	180K

Tape & Reel Specification

