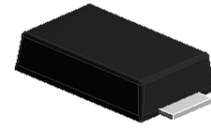


## Features

- 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



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	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)	5.0	A
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	UNIT
Maximum instantaneous forward voltage	IF=5A, Tj=25	VF	0.65	Volts
	IF=5A, Tj=125		0.60	
Maximum DC reverse current at rated DC blocking voltage	TA=25	IR	0.5	mA
	TA=125		20	
Typical junction capacitance	4.0 V, 1 MHz	CJ	220	pF
Typical thermal resistance	junction to mount	RθJM <sup>1)</sup>	26	°C/W

Note1:Thermal resistance from junction to mount,mounted on PCB with 8.0x8.0mm copper pads

## RATINGS AND CHARACTERISTICS CURVES

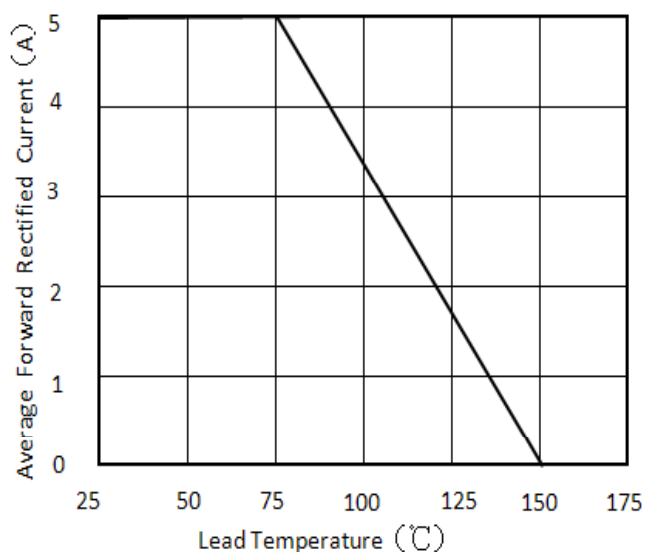


Figure 1. Forward Current Derating Curve

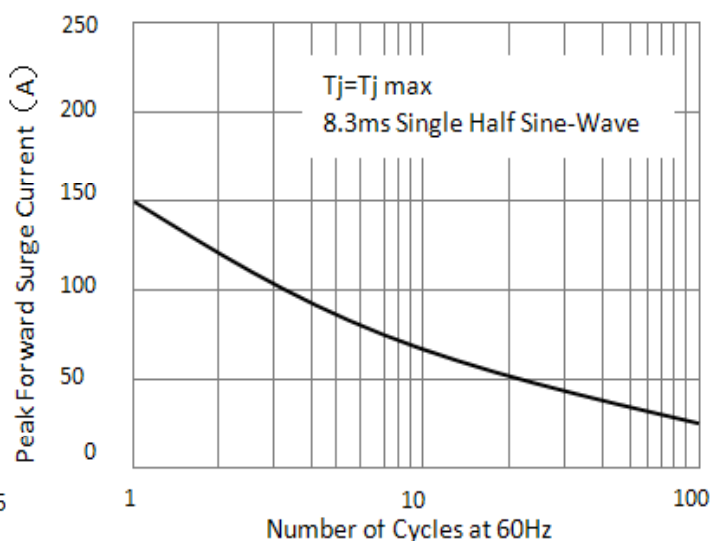


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

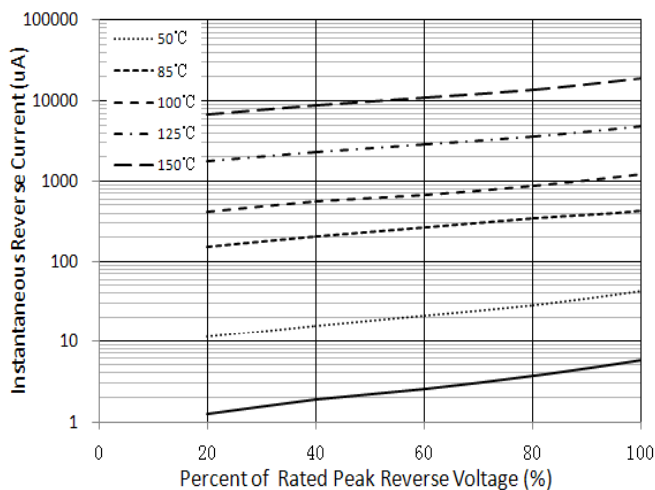


Figure 3. Typical Reverse Characteristics

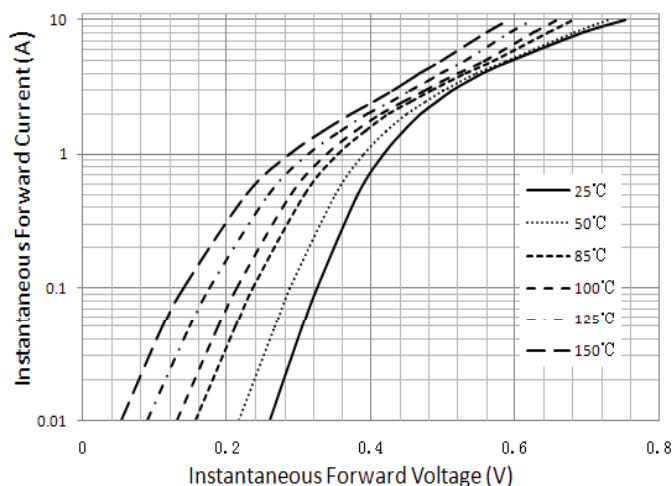


Figure 4. Typical Instantaneous Forward Characteristics

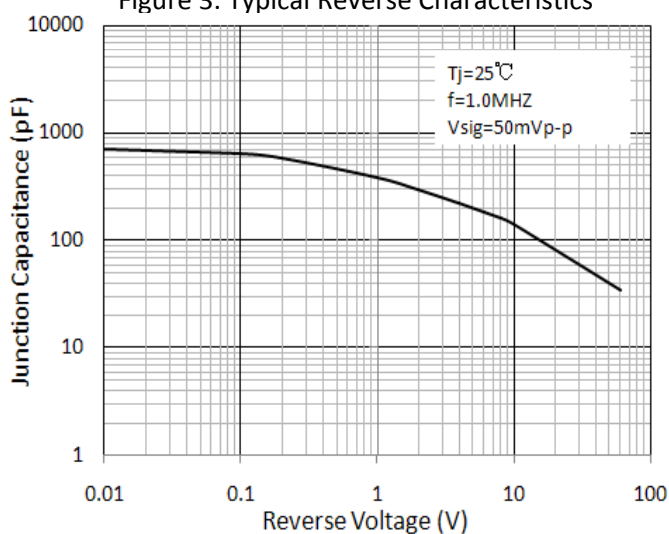
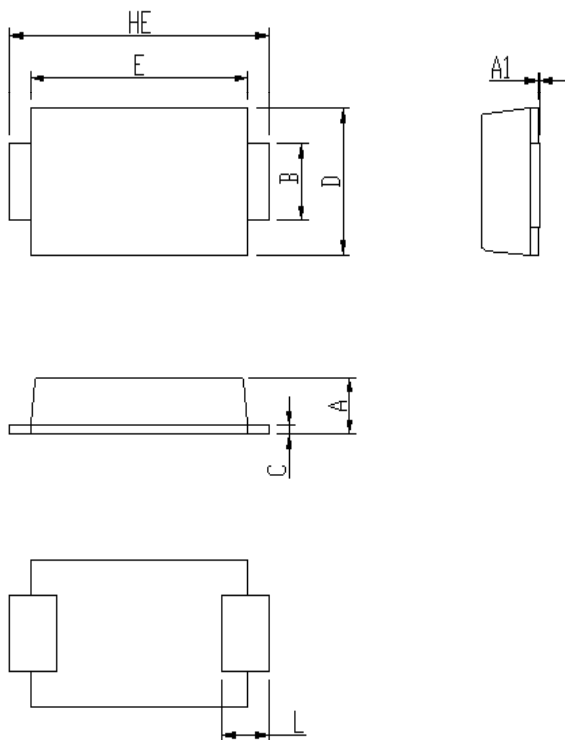


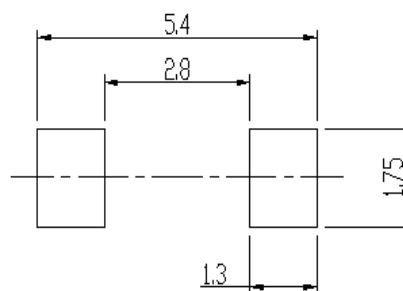
Figure 5. Typical Junction Capacitance

## PACKAGE OUTLINE DIMENSIONS (in millimeters)



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:

3000 pcs/Reel , 12mm Tape, 13" Reel

### Tape & Reel Specification

