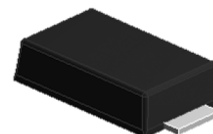


Features

- 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 of fast swiching in RF module, lighting, cellular phone, portable device, power supplies, and other consumer applications.

Maximum Ratings (TA = 25 °C unless otherwise noted)											
Parameter	Symbol	LS12	LS14	LS16	LS18	LS19	LS1B	LS1BH	LS1B5H	LS1CH	Unit
Maximum repetitive peak reverse voltage	VRRM	20	40	60	80	90	100	100	150	200	V
Maximum RMS voltage	VRMS	14	28	42	56	63	70	70	105	140	V
Maximum DC blocking voltage	VDC	20	40	60	80	90	100	100	150	200	V
Maximum average forward rectified current	IF(AV)	1.0									A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	30									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	LS12	LS14	LS16	LS18	LS19	LS1B	LS1BH	LS1B5H	LS1CH	Unit	
Maximum instantaneous forward voltage	IF=1A, TA=25°C	VF	0.50		0.70	0.81			0.90			Volts	
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	IR	0.3										mA
	TA=100°C		10										
Typical junction capacitance	4.0 V, 1 MHz	CJ	50										pF
Typical thermal resistance	junction to lead	RθJL ¹⁾	19										°C/W

Note1: Thermal resistance from junction to lead, mounted on PCB with 0.315×0.315 " (8.0×8.0mm) copper pads

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

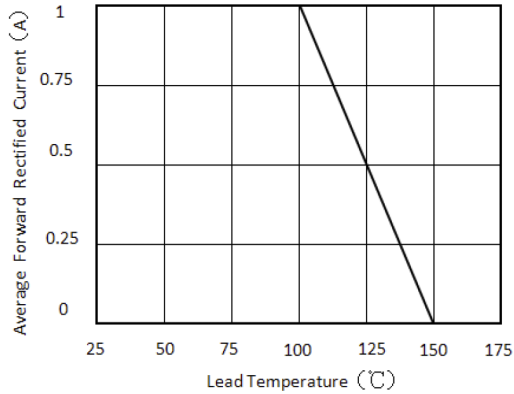


Figure 1. Forward Current Derating Curve

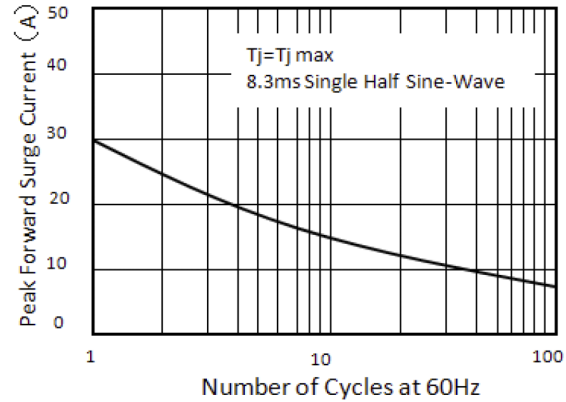


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

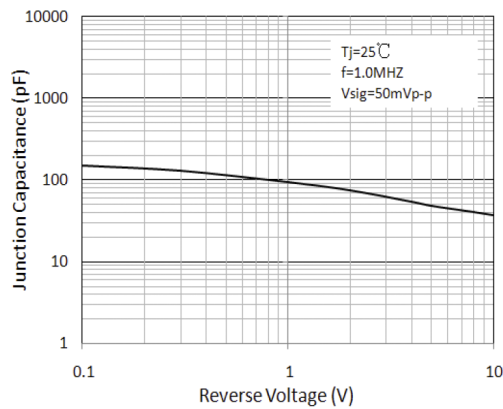


Figure 3. Typical Junction Capacitance

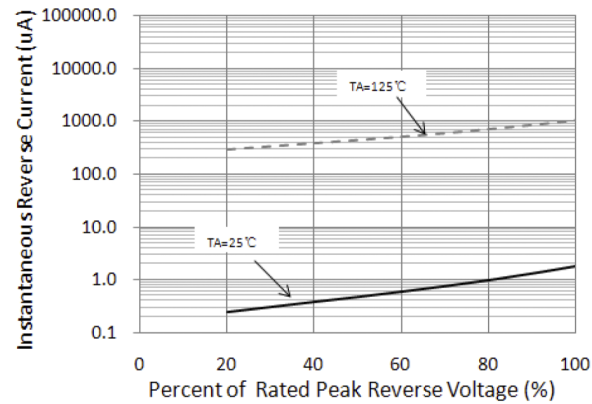


Figure 4. Typical Reverse Characteristics

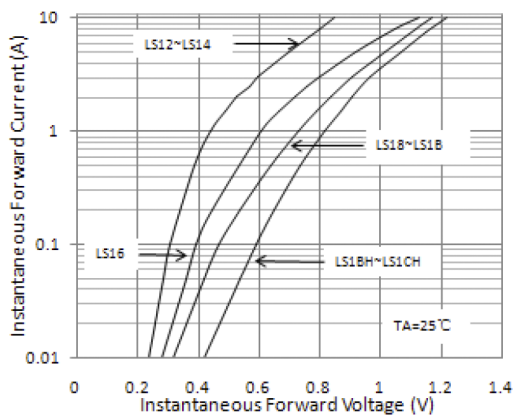
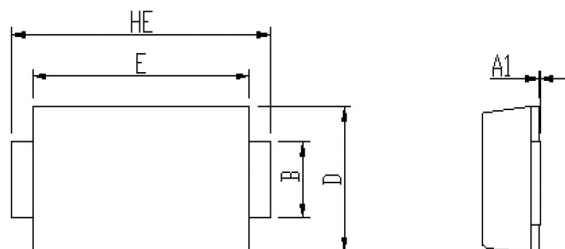
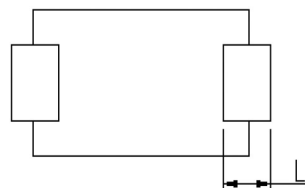
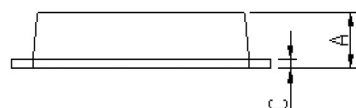


Figure 5. Typical Instantaneous Forward Characteristics

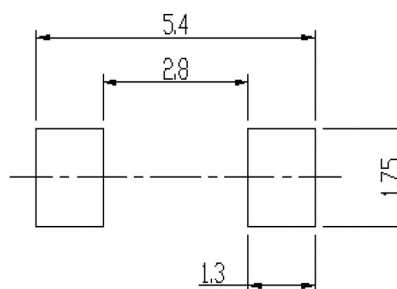
Package Outline Dimensions



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:

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

Tape & Reel Specification

