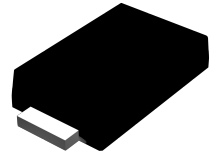


Features

- 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



Package: eSGB(SMAF)

Applications

For use in fast switching in RF modules, lighting, cell phone, portable devices, power supply and other consumer applications.

Maximum Ratings (T_A = 25°C unless otherwise noted)

Parameter	Symbol	LS12	LS14	LS16	LS18	LS19	LS1B	LS1BH	LS1B5H	LS1CH	Unit
Maximum Repetitive Peak Reverse	V _{RRM}	20	40	60	80	90	100	100	150	200	V
Maximum RMS Voltage	V _{RMS}	14	28	42	56	63	70	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	90	100	100	150	200	V
Maximum Average Forward Rectified Current	I _{F(AV)}	1.0									A
Peak Forward Surge Current (8.3 ms single half sine-wave superimposed on rated load)	I _{FSM}	30									A
Operating Junction and Storage Temperature Range	T _J , T _{STG}	- 55 to + 150						- 55 to + 175			°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Test Conditions	Symbol	LS12	LS14	LS16	LS18	LS19	LS1B	LS1BH	LS1B5H	LS1CH	Unit
Maximum Instantaneous Forward Voltage	I _F =1A, T _A =25°C	V _F	0.50		0.70	0.81			0.90		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	0.3									mA
	T _A =100°C		10									
Typical Junction Capacitance	4.0 V, 1 MHz	C _J	50								pF	
Typical Thermal Resistance	Junction to Lead	R _{θJL} ¹⁾	19								°C/W	

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

Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

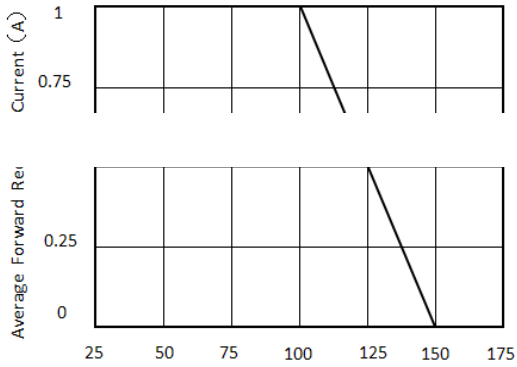


Figure 1. Forward Current Derating Curve

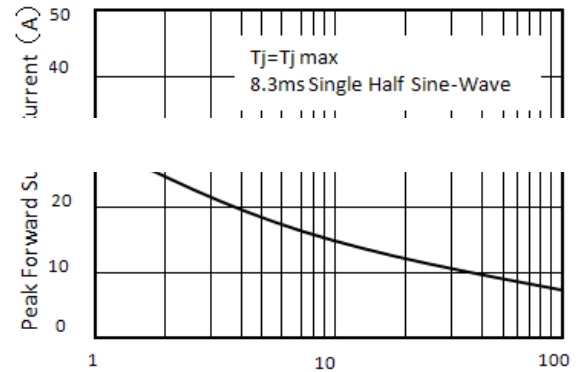


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

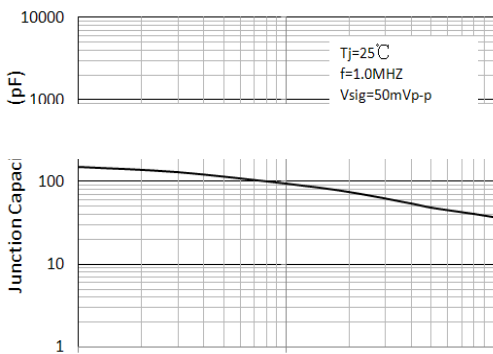


Figure 3. Typical Junction Capacitance

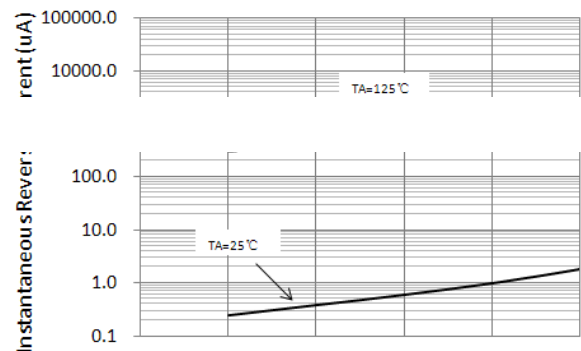


Figure 4. Typical Reverse Characteristics

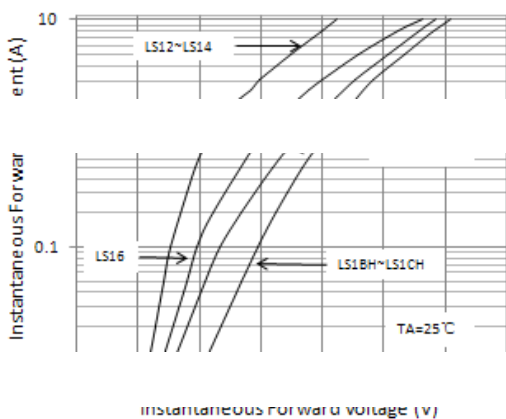
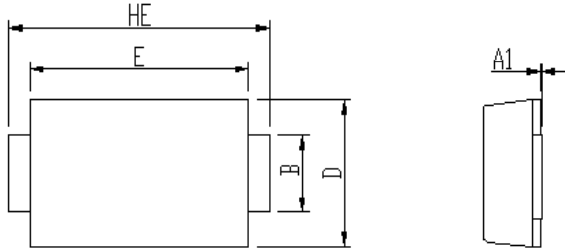


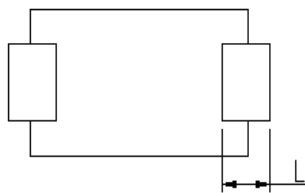
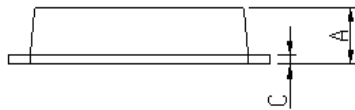
Figure 5. Typical Instantaneous Forward Characteristics

Package Outline Dimensions

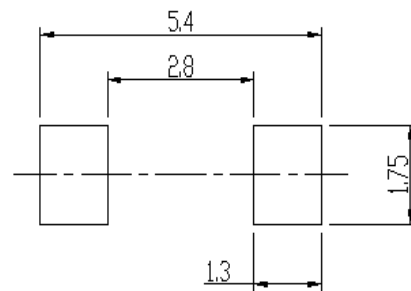
eSGB (SMAF)



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

