LS5BH

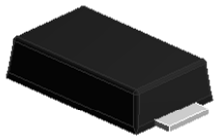
Surface Mount Schottky Rectifier

Reverse Voltage 100V Forward Current 5A

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

RoHS COMPLIANT



eSGB (SMAF)

Typical Applications

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

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

Parameter	Symbol	LS5BH	Unit
Maximum repetitive peak reverse voltage	VRRM	100	V
Maximum RMS voltage	VRMS	70	V
Maximum DC blocking voltage	VDC	100	V
Maximum average forward rectified current	$I_{F(AV)}$ 1)	5.0	A
	$I_{F(AV)}$ 2)	3.0	
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 + 175	°C

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

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Instantaneous forward voltage	IF=5A, TA=25℃	VF	-	-	0.85	Volts
	IF=5A, TA=125℃		-	0.70	-	
Maximum DC reverse current at rated DC blocking voltage	TA=25℃	IR	0.5			mA
	TA=125℃		50			
Typical junction capacitance	4.0 V, 1 MHz	C_J	25			pF
Typical thermal resistance	juntion to mount	$R_{\theta JM}$ 1)	20			℃/W

Note:1),The thermal resistance from junction to mount,mounted on P.C.B with 8×8mm copper pads,2 OZ,FR4 PCB

2), Fre air, Mounted on recommended copper pad area FR4 PCB

Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)

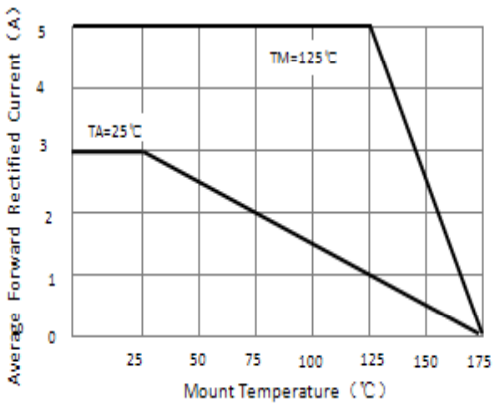


Figure 1.Forward Current Derating Curve

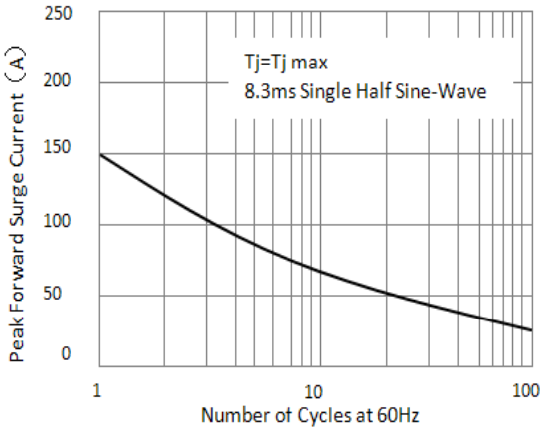


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

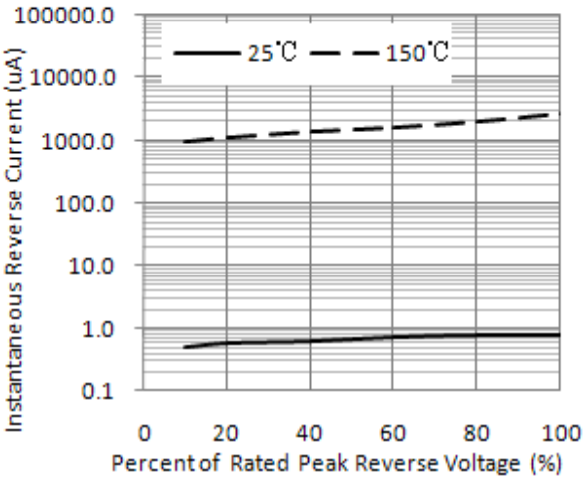


Figure 3. Typical Reverse Characteristics

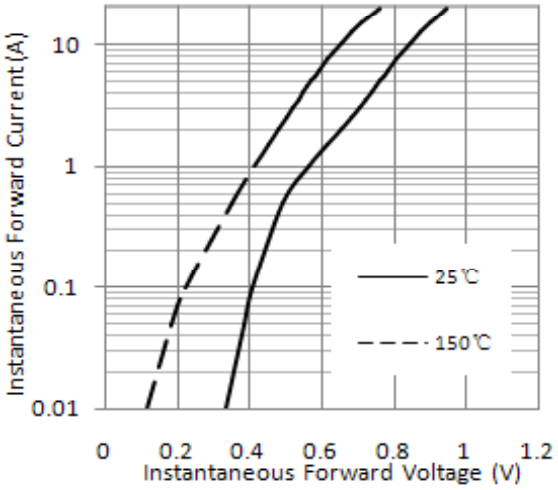


Figure 4. Typical Instantaneous Forward Characteristics

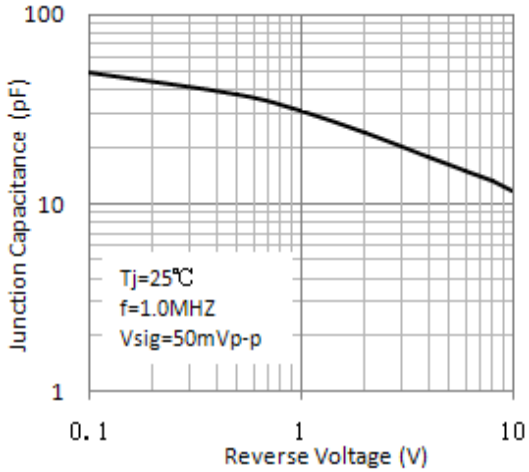
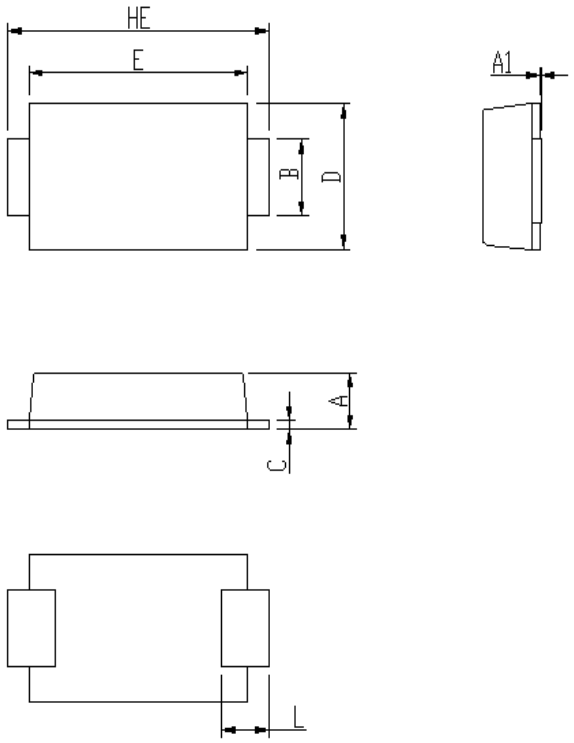


Figure 5. Typical Junction Capacitance

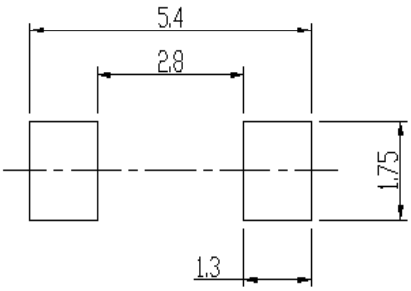
Package Outline Dimensions

in inches (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

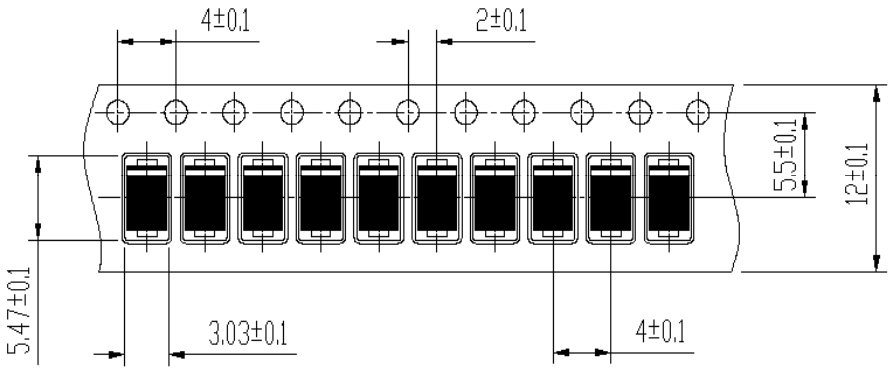


Packing Information

Packing quantities:

10,000 pcs/Reel，12mm Tape, 13" Reel

Tape & Reel Specification



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