LS565T

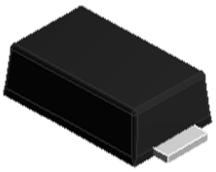
Surface Mount Schottky Rectifier

Reverse Voltage 65V Forward Current 5A

Features

- Schottky barrier diodes
- Low forward voltage drop
- AEC-Q101 qualified
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- Low profile， typical thickness 1.0mm

RoHS COMPLIANT



eSGB (SMAF)

Typical Applications

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

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

Parameter	Symbol	LS565T	Unit
Maximum repetitive peak reverse voltage	VRRM	65.0	V
Maximum RMS voltage	VRMS	45.5	V
Maximum DC blocking voltage	VDC	65.0	V
Maximum average forward rectified current	IF(AV)	5.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	110	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	TYP	MAX	Unit
Maximum instantaneous forward voltage	IF=5A, TA=25℃	VF	0.58	0.62	Volts
Maximum DC reverse current	TA=25℃	IR	0.35		mA
Typical junction capacitance	4.0 V, 1 MHz	C_J	360		pF
Typical thermal resistance[1)]	juntion to lead	$R_{\theta JL}$	20		℃/W

Note1:Thermal resistance from junction to lead,mounted on PCB with 30.0×30.0mm copper pads

Ratings and Characteristics Curves

(TA = 25℃ unless otherwise noted)

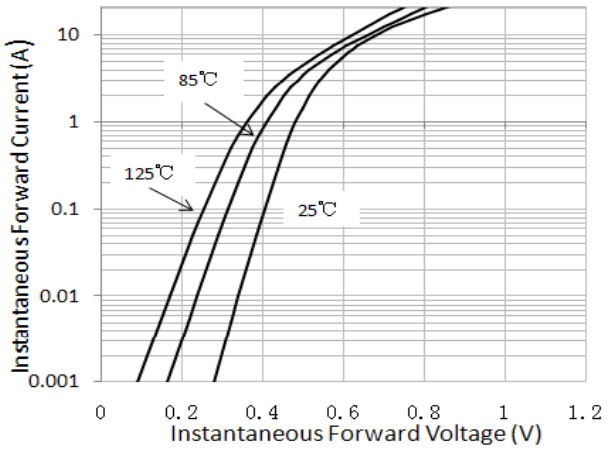


Figure 1. Typical Instantaneous Forward Characteristics

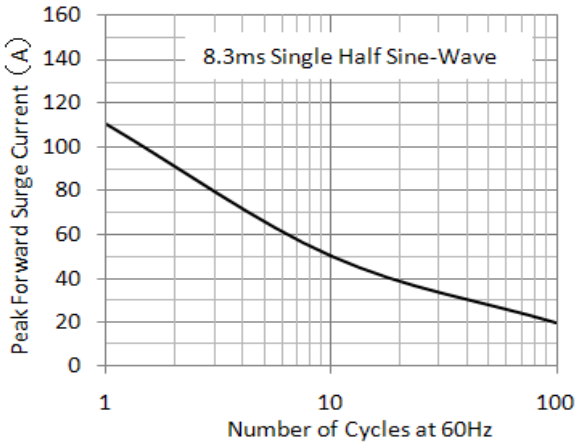


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

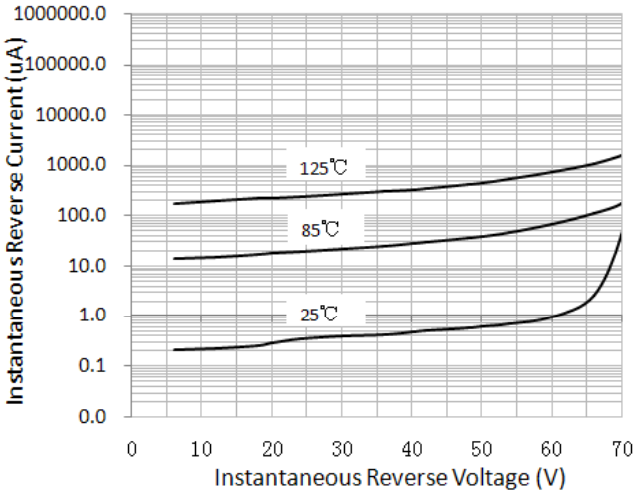


Figure 3. Typical Reverse Characteristics

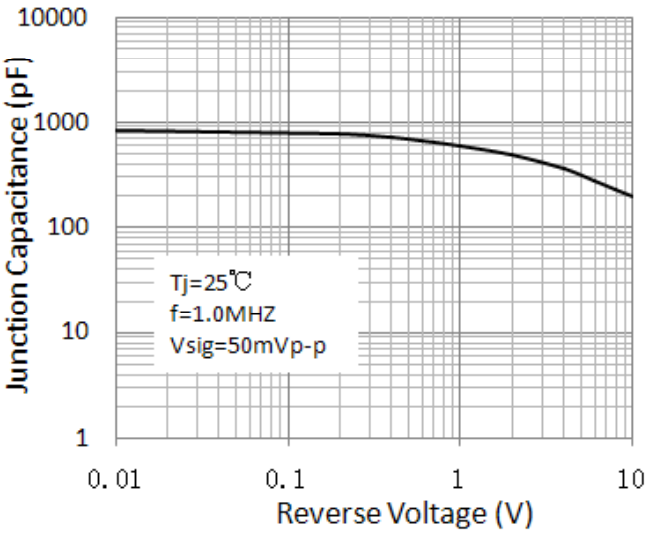


Figure 4. Typical Junction Capacitance

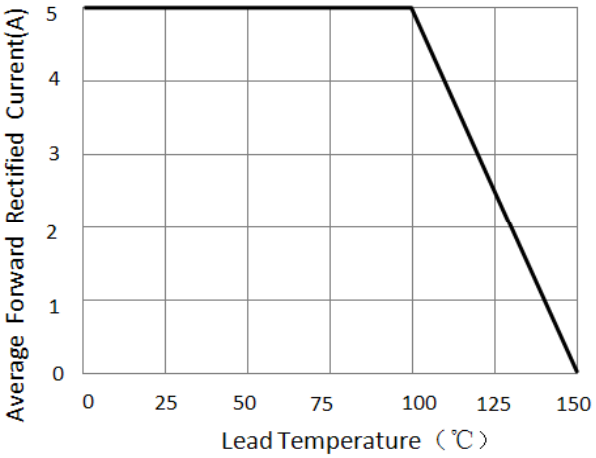
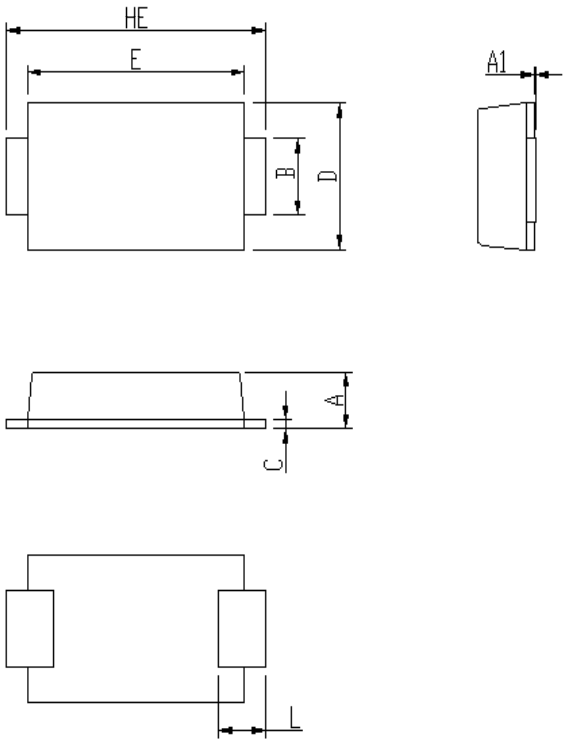


Figure 5.Forward Current Derating Curve

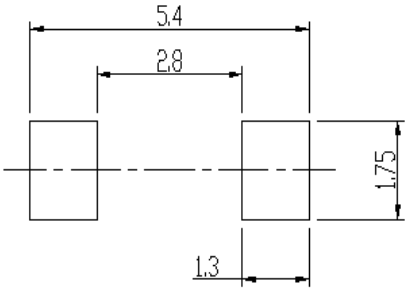
Package Outline Dimensions

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

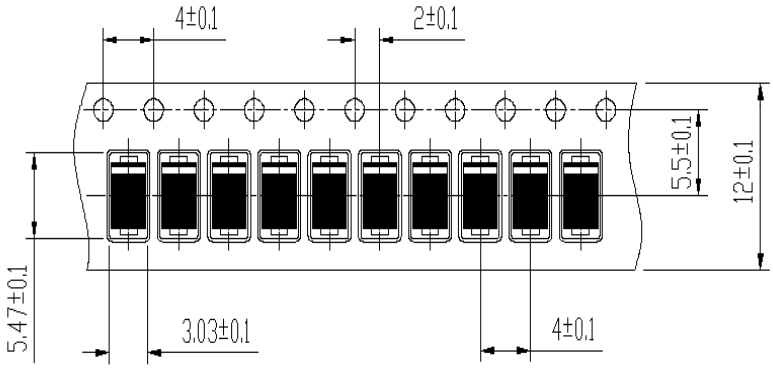


Packing Information

Packing quantities:

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

Tape & Reel Specification



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