

Surface Mount Schottky Rectifier Reverse Voltage 60V Forward Current 3A

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 in low voltage, high frequency inverters, free wheeling, and polarity protection application

Maximum Ratings (TA = 25 °C unless otherwise noted)							
Parameter	Symbol	LS36A	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	IF(AV)	3.0	Α				
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	100	А				
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150	°C				

Electrical Characteristics (TA = 25 °C unless otherwise noted)									
Parameter	Test Conditions	Symbol	Min	Тур	Max	Unit			
Maximum instantaneous forward voltage	IF=1A, TA=25℃	VF	-	0.48	0.60	V			
	IF=3A, TA=25℃		-	0.67	0.75				
	IF=3A, TA=125℃		-	0.59	-				
Maximum DC reverse current at rated DC blocking voltage	TA=25℃	IR	0.3			- mA			
	TA=125℃		30						
Typical junction capacitance	4.0 V, 1 MHz	CJ	94		pF				
Typical thermal resistance	juntion to mount	R _{θJM} ¹⁾	20			°C/W			

Note1:Thermal resistance from junction to mount, mounted on PCB with $8.0 \times 8.0 \text{mm}$ copper pads



Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

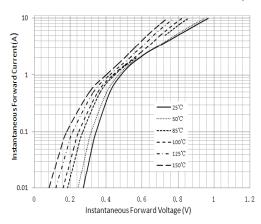


Figure 1. Typical Instantaneous Forward Characteristics

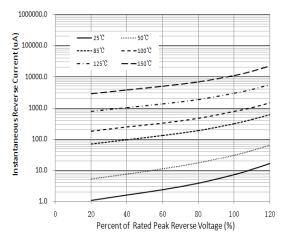


Figure 3. Typical Reverse Characteristics

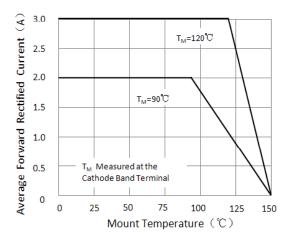


Figure 5. Forward Current Derating Curve

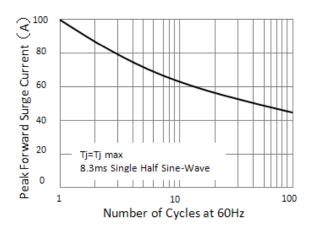


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

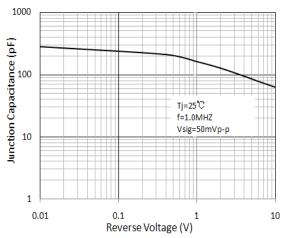
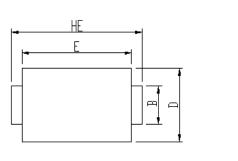


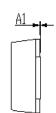
Figure 4. Typical Junction Capacitance



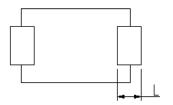
Package Outline Dimensions

in inches (millimeters)



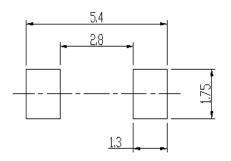






DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
Α	0.92	1.08	0.036	0.043
A1	0	0.1	0.000	0.004
В	1.25	1.45	0.049	0.057
С	0.1	0.25	0.004	0.010
D	2.6	2.8	0.102	0.110
Е	4.1	4.3	0.161	0.169
L	0.7	1.1	0.028	0.043
HE	4.8	5.2	0.189	0.205

Soldering footprint

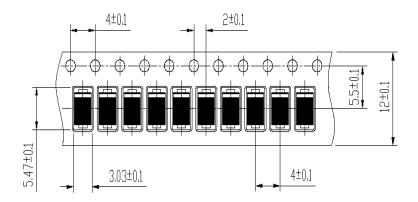


Packing Information

Packing quantities:

10,000 pcs/Reel, 12mm Tape, 13" Reel

Tape & Reel Specification





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