

Surface Mount Schottky Rectifier Reverse Voltage 200V 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	LS3C0	Unit		
Maximum repetitive peak reverse voltage	VRRM	200	V		
Maximum RMS voltage	VRMS	140	V		
Maximum DC blocking voltage	VDC	200	V		
Maximum average forward rectified current	IF(AV)	3.0	А		
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	100	А		
Operating junction and storage temperature	TJ, TSTG	- 55 to + 150	°C		

Electrical Characteristics (TA = 25 °C unless otherwise noted)								
Parameter	Test Conditions	Symbol	ТҮР	MAX	Unit			
Instantaneous forward voltage	IF=3A, TA=25℃	VF	-	0.87	Volts			
Maximum DC reverse current	TA=25℃	IR	50		uA			
at rated DC blocking voltage	TA=125℃	IIX	10		mA			
Typical junction capacitance	4.0 V, 1 MHz	CJ	69	_	рF			
Typical thermal resistance	juntion to lead	R _{eJL} 1)	20		°C/W			

Note1:Thermal resistance from junction to lead, mounted on PCB with 30.0x30.0mm copper pads



Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

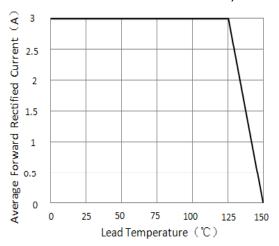


Figure 1. Forward Current Derating Curve

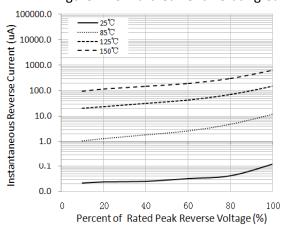


Figure 3. Typical Reverse Characteristics

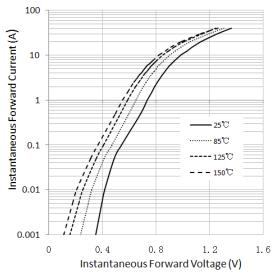


Figure 5. Typical Instantaneous Forward Characteristics

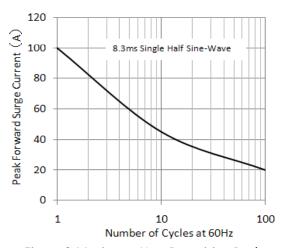


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

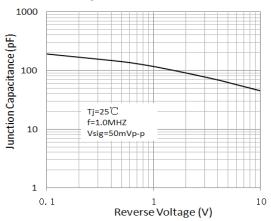
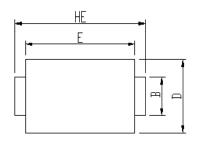


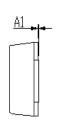
Figure 4. Typical Junction Capacitance



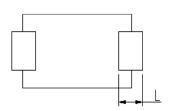
Package Outline Dimensions

in inches (millimeters)



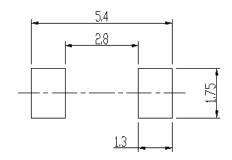






DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
Α	0.92	1.08	0.036	0.043
A1	0	0.1	0.000	0.004
В	1.25	1.45	0.049	0.057
С	0.1	0.25	0.004	0.010
D	2.6	2.8	0.102	0.110
E	4.1	4.3	0.161	0.169
L	0.7	1.1	0.028	0.043
HE	4.8	5.2	0.189	0.205

Soldering footprint

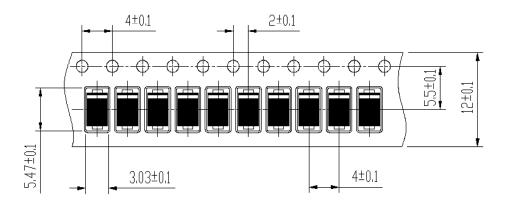


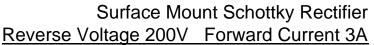
Packing Information

Packing quantities:

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

Tape & Reel Specification







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