Surface Mount Schottky Rectifier Reverse Voltage 40V Forward Current 2A

Features

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





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	LS24A	Unit				
Maximum repetitive peak reverse voltage	VRRM	40	V				
Maximum RMS voltage	VRMS	28	V				
Maximum DC blocking voltage	VDC	40	V				
Maximum average forward rectified current	IF(AV)	2.0	Α				
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	50	А				
Operating junction temperature range	T_J	- 55 to + 125	°C				
Storage temperature range	T _{STG}	- 55 to + 150	°C				

Electrical Characteristics (TA = 25 °C unless otherwise noted)								
Parameter	Test Conditions	Symbol	LS24A	Unit				
Maximum instantaneous forward voltage	IF=2A, TA=25℃	VF	0.50	Volts				
Maximum DC reverse current	TA=25℃	· IR	0.5	mΛ				
at rated DC blocking voltage	TA=125℃		50	mA				
Typical junction capacitance	4.0 V, 1 MHz	CJ	90	pF				
Typical thermal resistance	juntion to mount	R _{θJM} ¹⁾	20	°C/W				

Note1:Thermal resistance from junction to mount,mounted on PCB with 8.0×8.0mm copper pads



Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

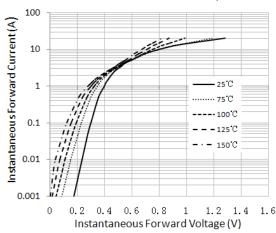


Figure 1. Typical Instantaneous Forward Characteristics

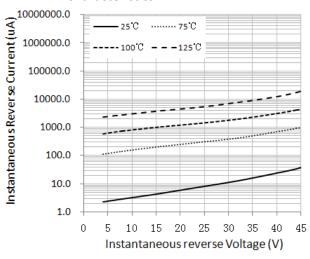


Figure 3. Typical Reverse Characteristics

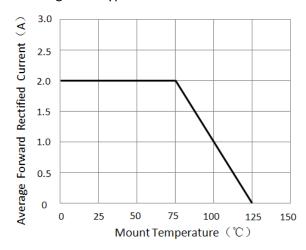


Figure 5. Forward Current Derating Curve

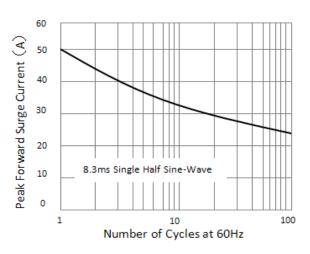


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

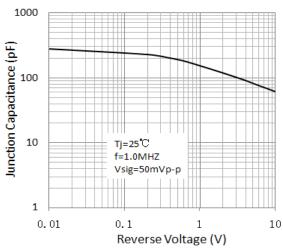


Figure 4. Typical Junction Capacitance

Unit: inch

MAX

0.043

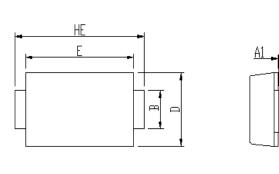
0.169

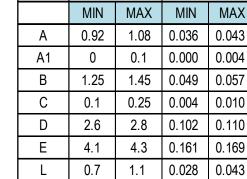
0.043

0.205



Package Outline Dimensions



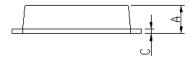


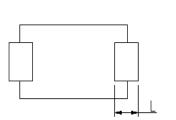
4.8

Unit: mm

DIM

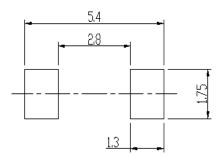
ΗE





Soldering footprint

5.2



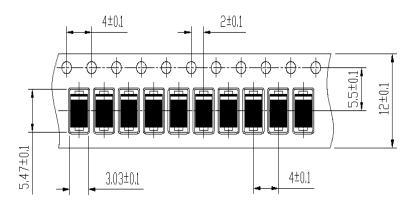
0.189

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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