

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

Features

- Super Low VF Schottky barrier diodes
- Very low profile typical height of 1.0 mm
- Low forward voltage drop
- · Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- AEC-Q101 qualified
- High temperature soldering guaranteed: 260 ℃/10 seconds
- Halogen-free according to IEC 61249-2-21 definition





eSGA (SOD-123FL)

Typical Applications

For use of fast swiching in RF module, lighting, cellular phone, portable device, power supplies and other consumer applications.

Maximum Ratings (TA = 25 °C unless otherwise noted)						
Parameter	Symbol	FSL24	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 sinewave superimposed on rated load	IFSM	50	А			
Operating junction temperature range	TJ	- 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	FSL24	Unit		
Maximum instantaneous	IF=1A,TA=25℃	V _F	0.40	Volts		
forward voltage	IF=2A,TA=25℃		0.45	Voits		
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	- I _R	1000	uA		
	TA=100°C		50	mA		
Typical junction capacitance	4.0 V, 1 MHz	C _J	120	pF		
Typical thermal resistance ¹⁾	juntion to ambient	$R_{\theta JA}$	100			
	juntion to case	$R_{ heta JC}$	50	°C/W		
	juntion to mount	$R_{\theta JM}$	25			

Note:1), The thermal resistance from junction to ambient, case or mount, mounted on P.C.B with 5x5mm copper pads, 2 OZ, FR4 PCB



Ratings and Characteristics Curves

 $(TA = 25^{\circ}C \text{ unless otherwise noted})$

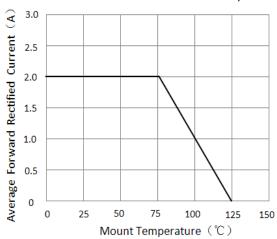


Figure 1. Forward Current Derating Curve

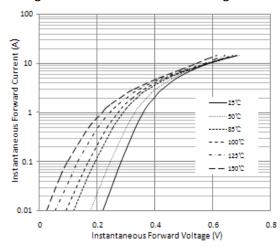


Figure 3. Typical Instantaneous Forward Characteristics

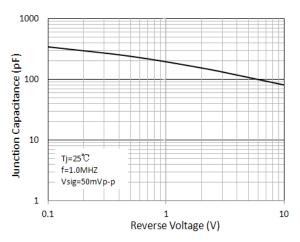


Figure 5. Typical Junction Capacitance

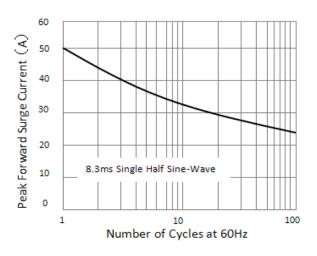


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

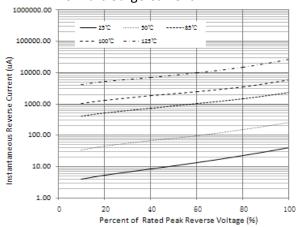
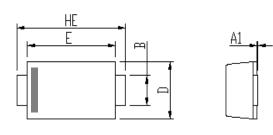


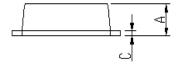
Figure 4. Typical Reverse Characteristics

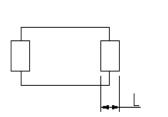


Package Outline Dimensions

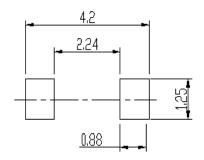


DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
Α	0.9	1.08	0.035	0.043
A1	0	0.1	0.000	0.004
В	0.85	1.05	0.033	0.041
С	0.1	0.25	0.004	0.010
D	1.7	2	0.067	0.079
Е	2.9	3.1	0.114	0.122
L	0.43	0.83	0.017	0.033
HE	3.5	3.9	0.138	0.154





Soldering footprint

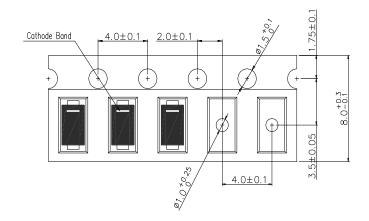


Packing Information

Packing quantities:

3000 pcs/Reel, 40 Reels/Box; 8mm Tape, 7" Reel

Tape & Reel Specification





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