

Surface Mount Schottky Rectifier Reverse Voltage 30V 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°C/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	FSL23S	Unit			
Maximum repetitive peak reverse voltage	VRRM	30	V			
Maximum RMS voltage	VRMS	21	V			
Maximum DC blocking voltage	VDC	30	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	FSL23S	Unit		
Maximum instantaneous	IF=1A,TA=25℃	V_{F}	0.43	Volts		
forward voltage	IF=2A,TA=25℃	VF	0.5	VOILS		
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	· I _R	500	uA		
	TA=100°C		30	mA		
Typical junction capacitance	4.0 V, 1 MHz	CJ	120	pF		
Typical thermal resistance ¹⁾	juntion to ambient	$R_{\theta JA}$	100			
	juntion to case	$R_{\theta JC}$	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

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

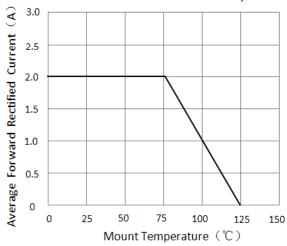


Figure 1. Forward Current Derating Curve

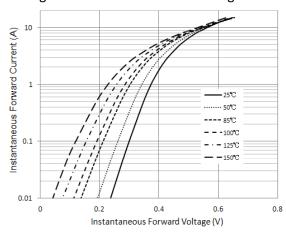


Figure 3. Typical Instantaneous Forward Characteristics

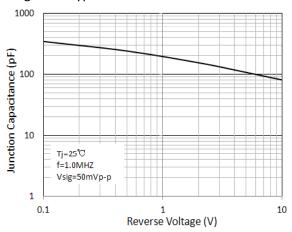


Figure 5. Typical Junction Capacitance

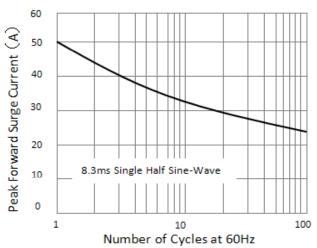


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

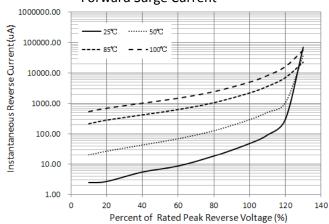
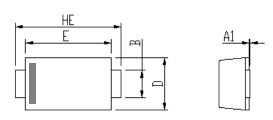


Figure 4. Typical Reverse Characteristics

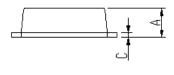


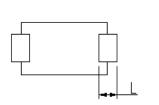
Package Outline Dimensions

in inches (millimeters)

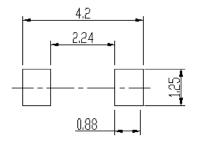


DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
Α	0.9	1.08	0.035	0.043
A1	0	0.1	0.000	0.004
В	0.85	1.05	0.033	0.041
С	0.1	0.25	0.004	0.010
D	1.7	2	0.067	0.079
Е	2.9	3.1	0.114	0.122
L	0.43	0.83	0.017	0.033
HE	3.5	3.9	0.138	0.154





Soldering footprint

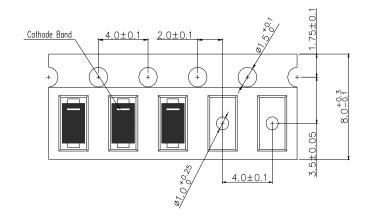


Packing Information

Packing quantities:

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

Tape & Reel Specification



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Reverse Voltage 30V Forward Current 2A

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