

FS14NS

Surface Mount Schottky Rectifier Reverse Voltage 40V Forward Current 1A

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	FS14NS	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)	1.0	Α				
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	25	Α				
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	Тур.	Max	Unit				
Instantaneous forward	0.5A,TA=25℃	V _F	0.43	-	Valta				
voltage	1 A ,TA=25℃		-	0.52	- Volts				
Reverse current at rated DC blocking voltage	TA=25°C	l _R	-	0.50	m /				
	TA=100°C		-	30	— mA				
Typical junction capacitance	4.0 V, 1 MHz	CJ	46		pF				
Typical thermal resistance ¹⁾	juntion to ambient	$R_{\theta JA}$	95						
	juntion to case	$R_{ heta JC}$	60		°C/W				
	juntion to mount	$R_{\theta JM}$	30						

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

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

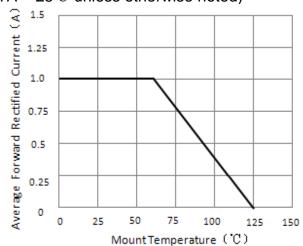


Figure 1. Forward Current Derating Curve

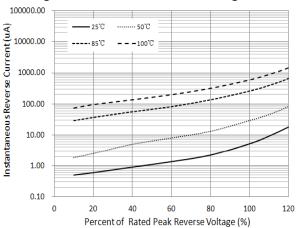


Figure 3. Typical Reverse Characteristics

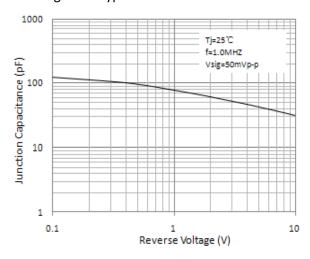


Figure 5. Typical Junction Capacitance

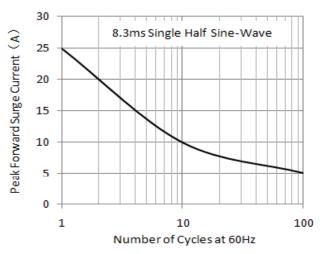


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

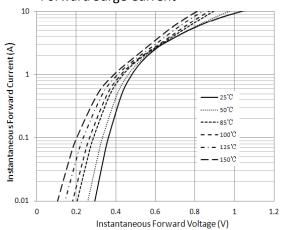
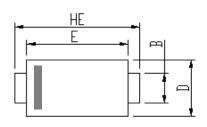


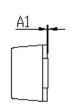
Figure 4. Typical Instantaneous Forward Characteristics

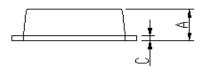
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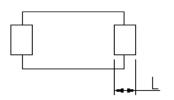
Package Outline Dimensions

in inches (millimeters)



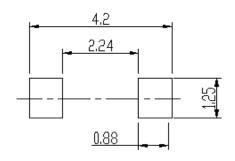






DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
Α	0.9	1.08	0.035	0.043
A1	0	0.1	0.000	0.004
В	0.85	1.05	0.033	0.041
С	0.1	0.25	0.004	0.010
D	1.7	2	0.067	0.079
Е	2.9	3.1	0.114	0.122
L	0.43	0.83	0.017	0.033
HE	3.5	3.9	0.138	0.154

Soldering footprint

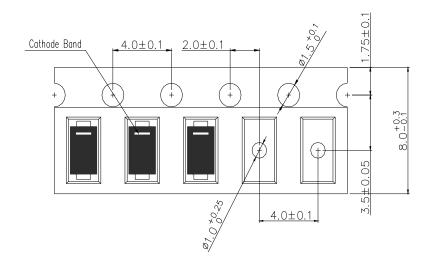


Packing Information

Packing quantities:

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

Tape & Reel Specification





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