

# Surface Mount Schottky Rectifier Reverse Voltage 60V 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 ℃/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	FSL16	Unit			
Maximum repetitive peak reverse voltage	VRRM	60	V			
Maximum RMS voltage	VRMS	42	V			
Maximum DC blocking voltage	VDC	60	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	40	А			
Operating junction temperature range	TJ	-55 to +125	°C			
Storage temperature range	TSTG	-55 to +150	°C			

Electrical Characteristics (TA = 25 °C unless otherwise noted)								
Parameter	Test Conditions	Symbol	Тур	Max	Unit			
Instantaneous forward voltage	IF=1A,TA=25°C	V <sub>F</sub>	0.48	0.53	\ / - It -			
	IF=1A,TA=125°C		0.45	-	Volts			
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	- I <sub>R</sub>	0	.2	A			
	TA=125°C		30		mA			
Typical junction capacitance	4.0 V, 1 MHz	CJ	65		pF			
Typical thermal resistance	juntion to mount	R <sub>a IM</sub> <sup>1)</sup>	20		°C/W			

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



### **Ratings and Characteristics Curves**

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

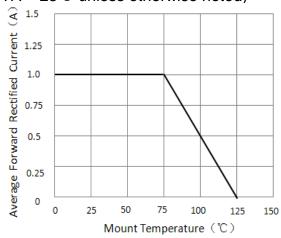


Figure 1. Forward Current Derating Curve

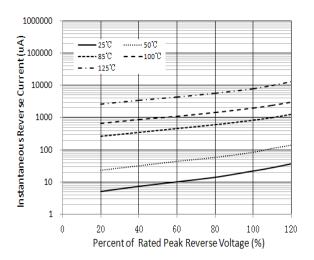


Figure 3. Typical Reverse Characteristics

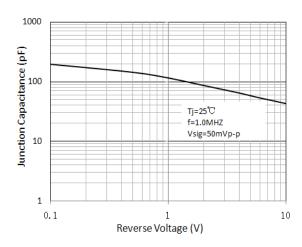


Figure 5. Typical Junction Capacitance

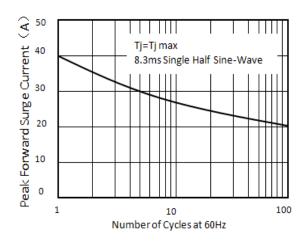


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

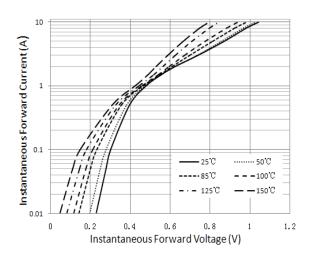
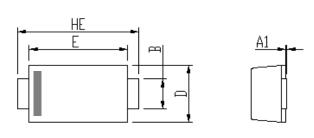


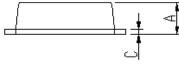
Figure 4. Typical Instantaneous Forward Characteristics

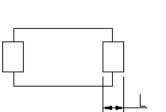


### **Package Outline Dimensions**

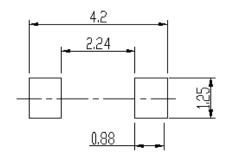


DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
Α	0.9	1.08	0.035	0.043
A1	0	0.1	0.000	0.004
В	0.85	1.05	0.033	0.041
С	0.1	0.25	0.004	0.010
D	1.7	2	0.067	0.079
Е	2.9	3.1	0.114	0.122
L	0.43	0.83	0.017	0.033
HE	3.5	3.9	0.138	0.154





Soldering footprint

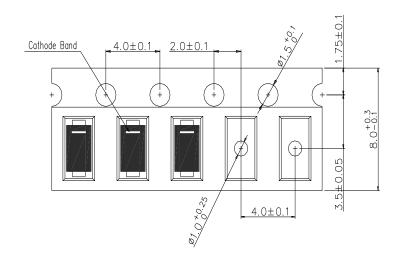


### **Packing Information**

#### Packing quantities:

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

**Tape & Reel Specification** 



# Surface Mount Schottky Rectifier

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