

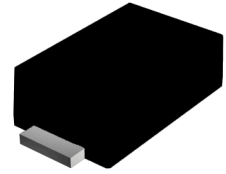


# THE DATASHEET OF FF7



## Features

- 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



Package: eSGA  
(SOD-123FL)



RoHS  
COMPLIANT

## Typical Applications

For use of general purpose rectification in lighting, cellular phone, portable device, power supplies and other consumer applications.

## Maximum Ratings (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	FF1	FF2	FF3	FF4	FF5	FF6	FF7	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	30							A
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	- 55 to + 150							°C

## Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Test Conditions	Symbol	FF1	FF2	FF3	FF4	FF5	FF6	FF7	Unit
Maximum Instantaneous Forward Voltage	1 A	V <sub>F</sub>	1.3							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>A</sub> =25°C T <sub>A</sub> =125°C	I <sub>R</sub>	5 50							µA
Maximum Reverse Recovery Time	I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>tr</sub> =0.25A	t <sub>rr</sub>	150				250	500		nS
Typical Junction Capacitance	4.0 V, 1 MHz	C <sub>J</sub>	8.2							pF
Typical Thermal Resistance <sup>1)</sup>	junction to ambient	R <sub>θJA</sub>	76							°C/W
	junction to case	R <sub>θJC</sub>	42							
	junction to mount	R <sub>θJM</sub>	7							

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

## Ratings and Characteristics Curves

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

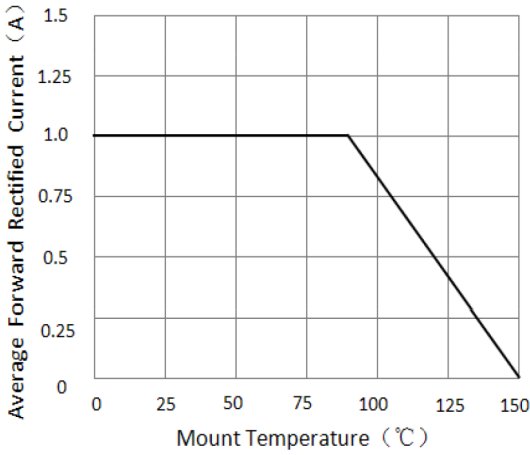


Figure 1. Forward Current Derating Curve

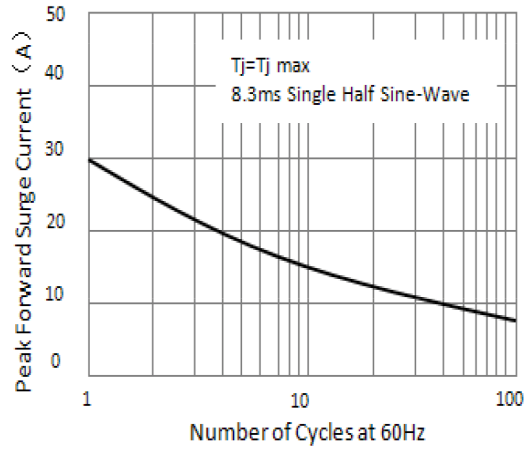


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

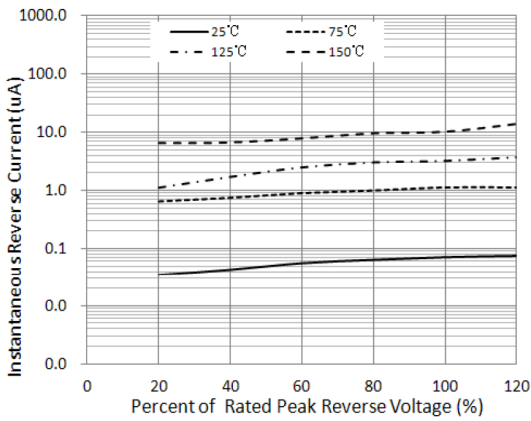


Figure 3. Typical Reverse Characteristics

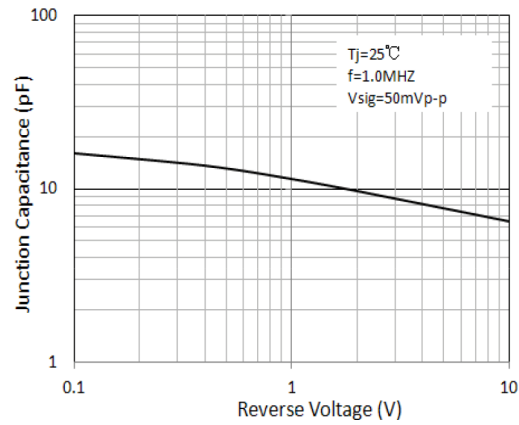


Figure 4. Typical Junction Capacitance

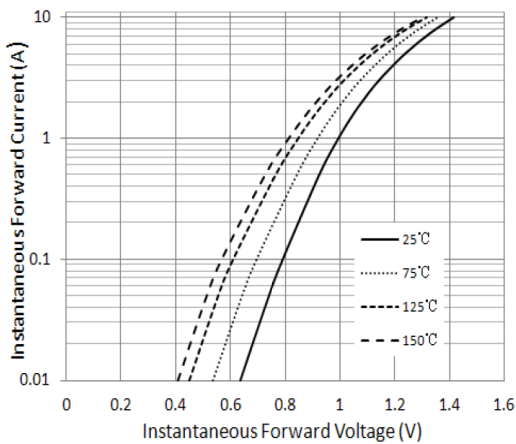
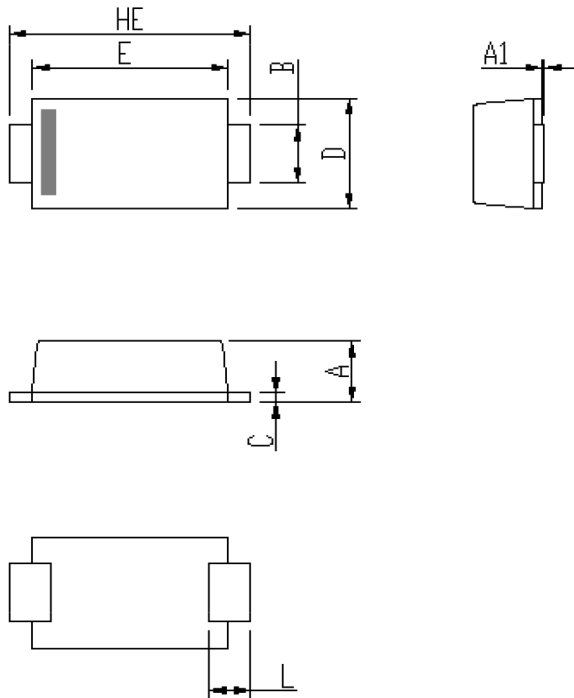


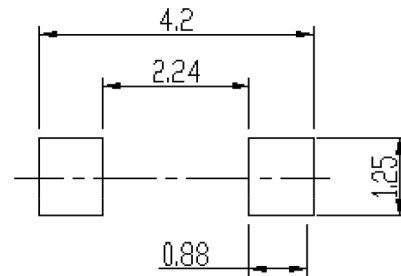
Figure 5. Typical Instantaneous Forward Characteristics

## Package Outline Dimensions



DIM	Unit: mm		Unit: inch	
	MIN	MAX	MIN	MAX
A	0.9	1.08	0.035	0.043
A1	0	0.1	0.000	0.004
B	0.85	1.05	0.033	0.041
C	0.1	0.25	0.004	0.010
D	1.7	2	0.067	0.079
E	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

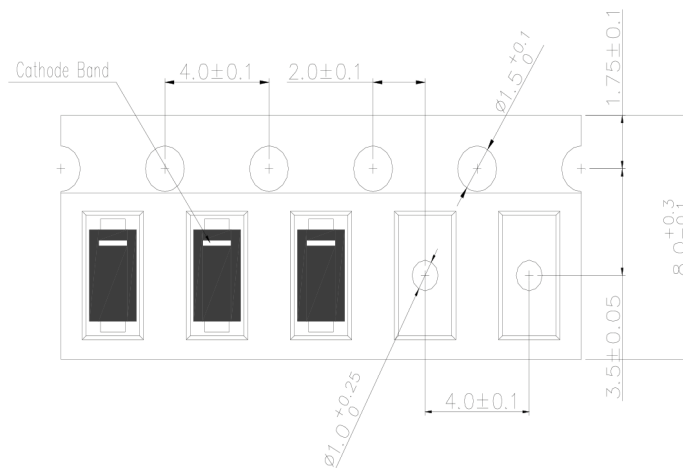


## Packing Information

### Packing quantities:



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

### Tape & Reel Specification



## Looking for pricing, stock, or lifecycle information?

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