

## Surface Mount General Purpose Silicon Rectifiers

Reverse Voltage - 2000 V

Forward Current - 1 A

### FEATURES

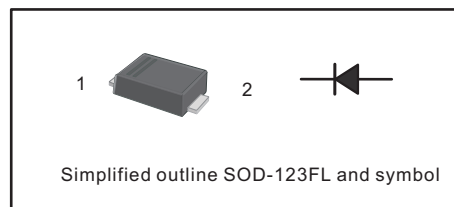
- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Lead free in comply with EU RoHS 2011/65/EU directives

### MECHANICAL DATA

- Case: SOD-123FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 15mg / 0.00053oz

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	A20	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	2000	V
Maximum Average Forward Rectified Current at $T_c = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	1	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	30	A
Maximum Instantaneous Forward Voltage at 1 A	$V_F$	1.1	V
Maximum Reverse Current $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	$I_R$	5 50	$\mu\text{A}$
Typical Junction Capacitance <sup>1)</sup>	$C_j$	20	pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	95	$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	$^\circ\text{C}$

1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

2) P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.



Fig.1 Forward Current Derating Curve

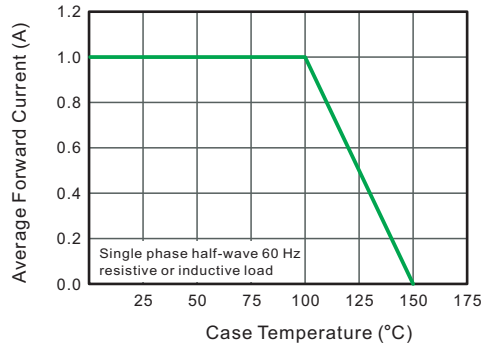


Fig.2 Typical Reverse Characteristics

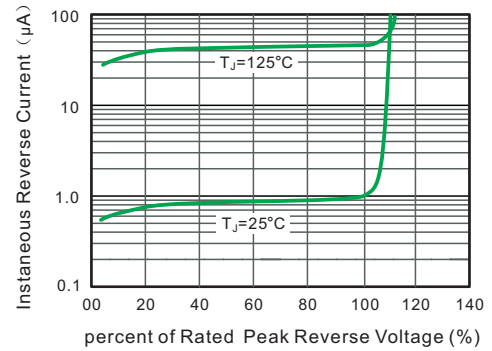


Fig.3 Typical Instantaneous Forward Characteristics

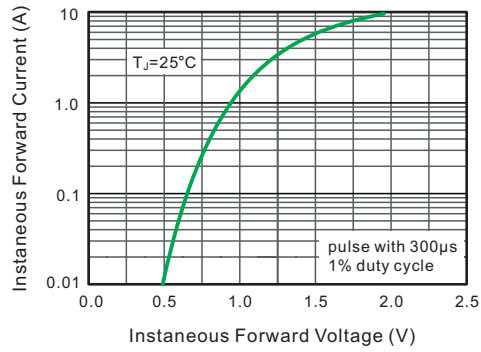


Fig.4 Typical Junction Capacitance

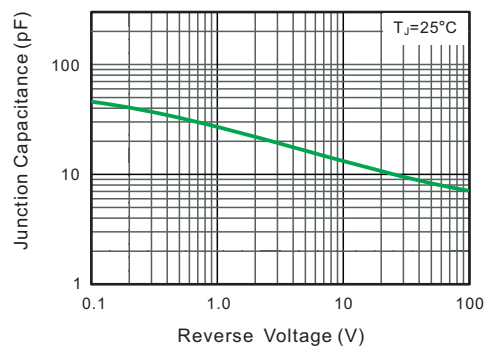
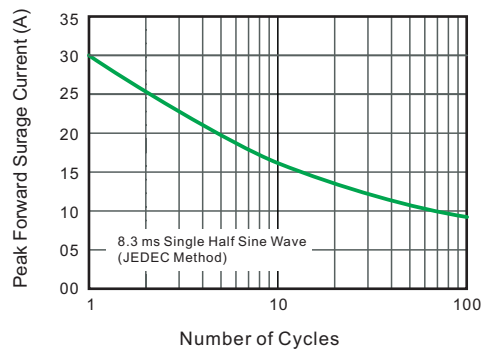


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

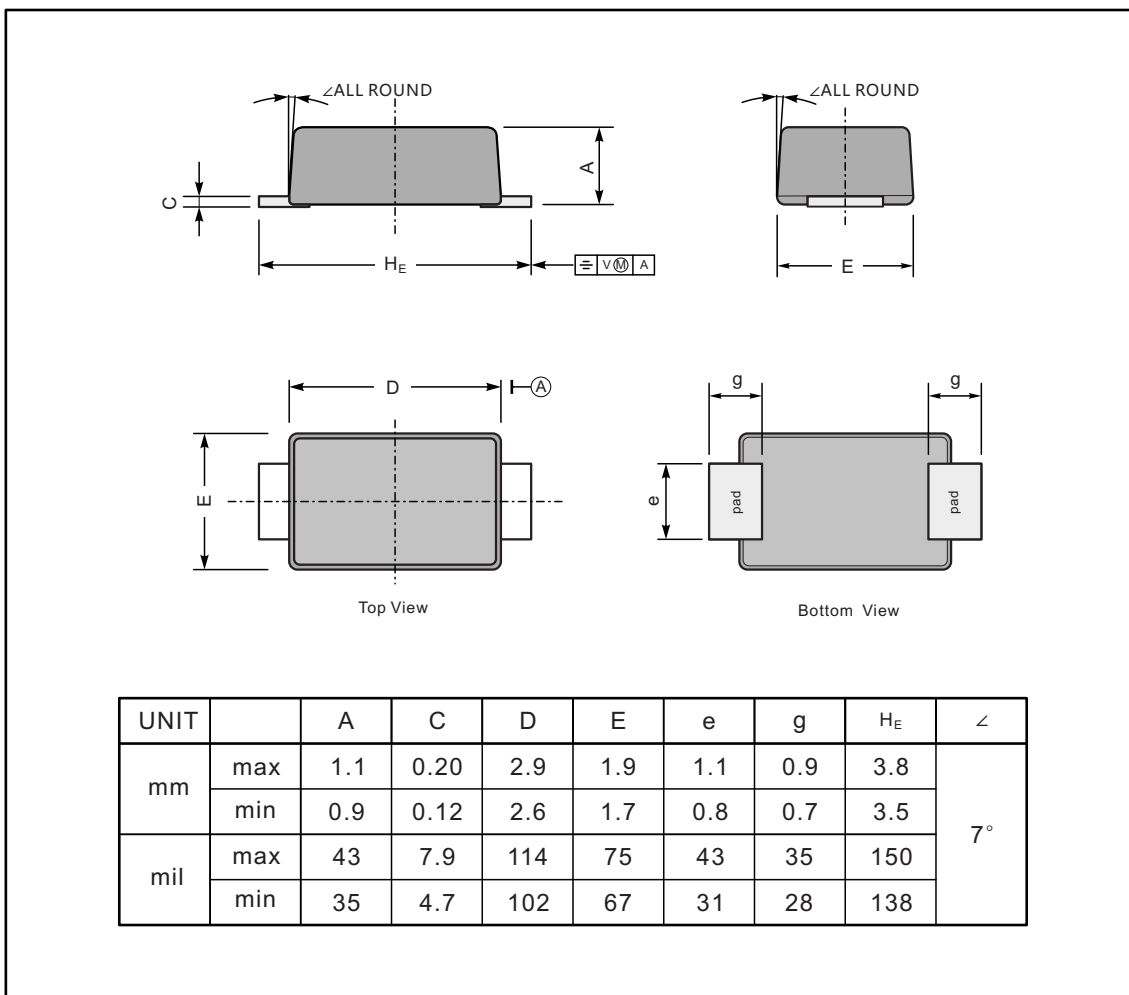




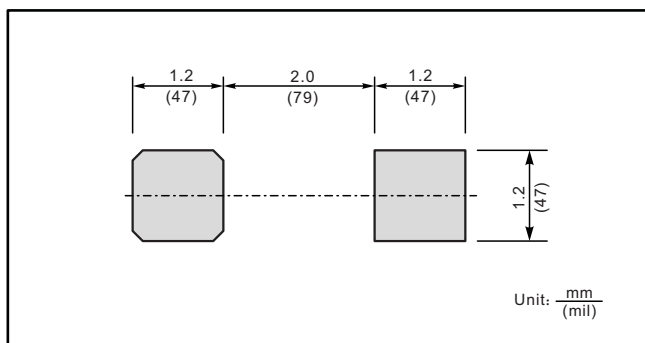
### PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



#### The recommended mounting pad size



#### Marking

Type number	Marking code
A20	A20