

1N4001FL THRU 1N4007FL

SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIERS

Forward current-1.0A

Reverse voltage-50V to1000V

FEATURES

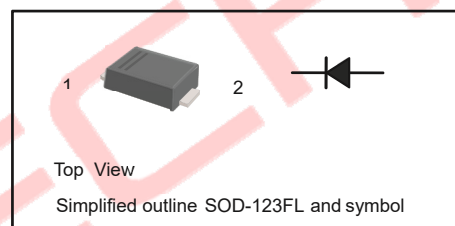
- ◆ For surface mount applications
- ◆ Glass passivated chip junction
- ◆ Low profile package
- ◆ Ideal for automated placement
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

MECHANICAL DATA

- ◆ Case:SOD-123FL molded plastic body
- ◆ Terminals:Solderable per MIL-STD-750,Method 2026
- ◆ Weight: : Approximated 0.015 grams



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 derating by 20 %

PARAMETER	SYMBOL	1N4001FL	1N4002FL	1N4003FL	1N4004FL	1N4005FL	1N4006FL	1N4007FL	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_C=125^\circ\text{C}$	$I_{F(AV)}$	1							A
Peak Forward Surge Current (Note1)	I_{FSM}	30							A
Maximum Forward Voltage at 1.0A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	5 50							μA
Junction Capacitance (Note2)	C_J	11							pF
Thermal Resistance (Note3)	$R_{\theta JA}$	90							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

Notes: 1. Measured at 8.3 ms single half sine wave superimposed on rated load (JEDEC Method) .

2. Measured at 1MHz and applied reverse voltage of 4.0 D.C.

3. P.C.B.mounted with 2.0 " \times 2.0 " (5 \times 5 cm) copper pad areas.

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RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

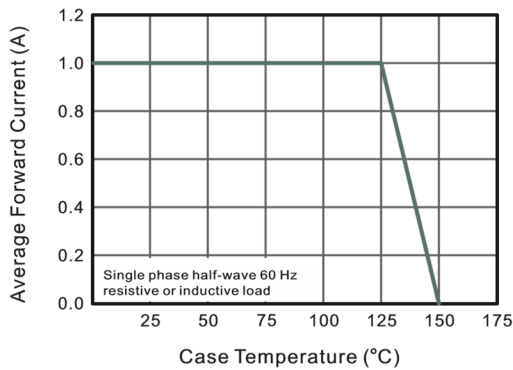


Fig.2 Typical Instantaneous Reverse Characteristics

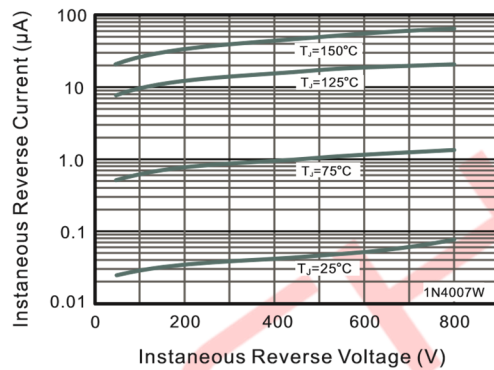


Fig.3 Typical Forward Characteristic

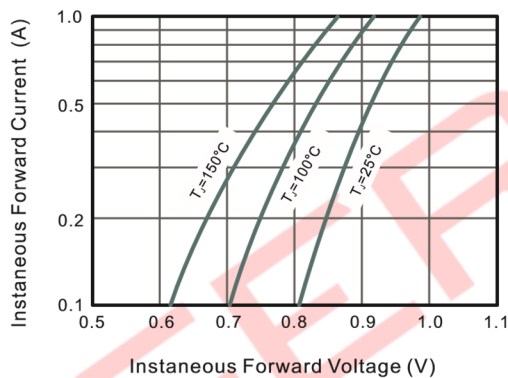


Fig.4 Typical Junction Capacitance

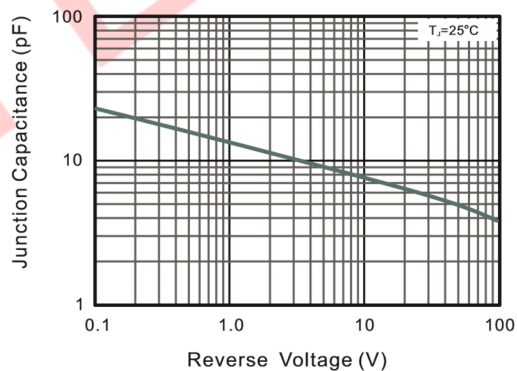
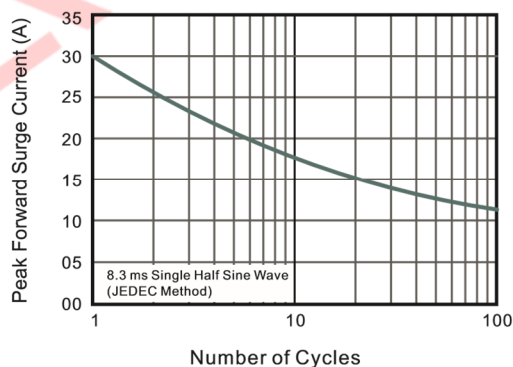


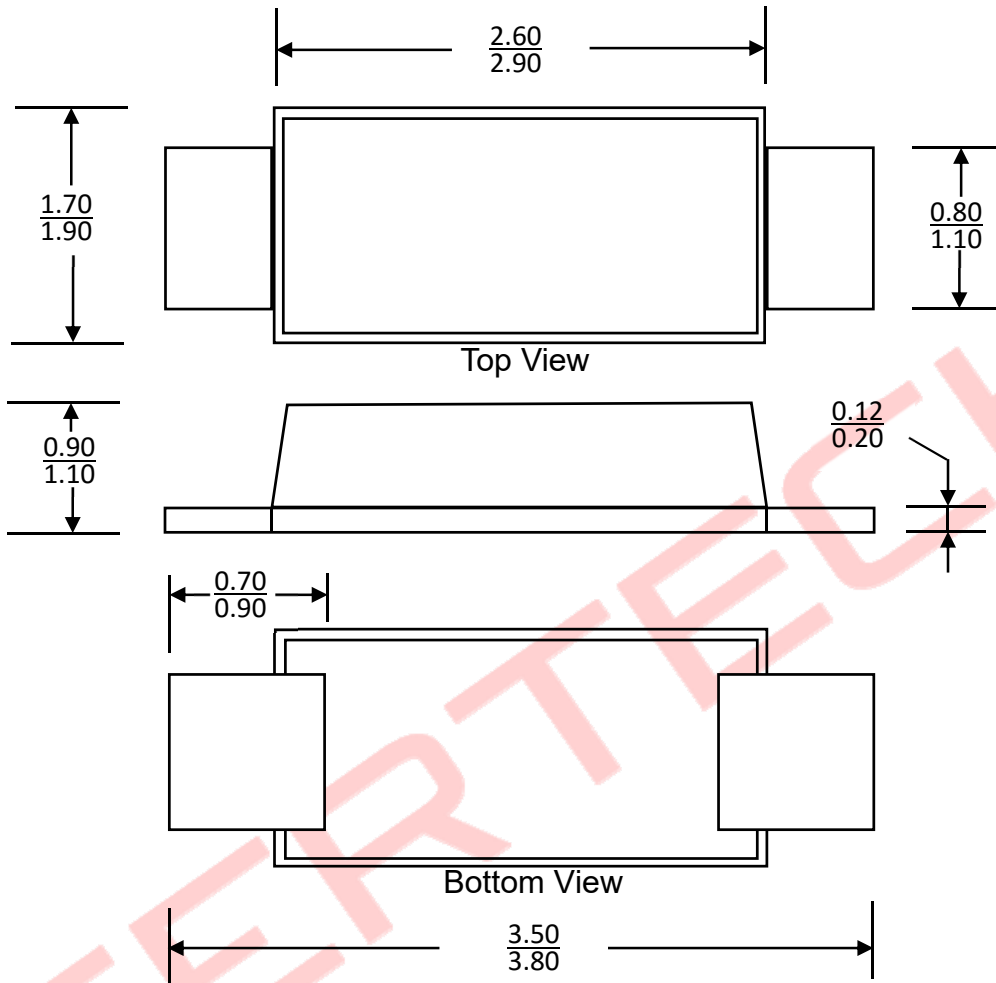
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



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PACKAGE OUTLINE

SOD-123FL



Dimensions in millimeters

ORDERING INFORMATION

Device	Package	Shipping
1N4001FL thru 1N4007FL	SOD-123FL	3,000/Tape & Reel (7 inches)