



SURFACE MOUNT GENERAL PURPOSE SILICON RECTIFIERS

Reverse voltage-50V to1000V Forward current-1.0A

FEATURES

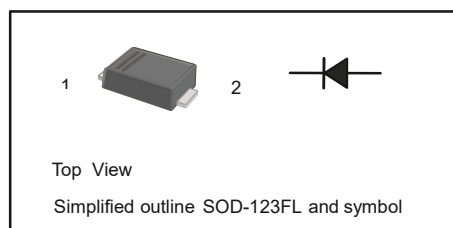
- ◆ For surface mount applications
- ◆ Glass passivated chip junction
- ◆ Low reverse leakage
- ◆ Metallurgically bonded construction

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 0.02 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	DSR1A FL	DSR1B FL	DSR1D FL	DSR1G FL	DSR1J FL	DSR1K FL	DSR1M FL	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 $T_A=65^\circ\text{C}$	$I_{F(AV)}$	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	10 50							μA
Typical Junction Capacitance(Note2)	C_J	4							pF
Typical Thermal Resistance(note3)	$R_{\theta JA}$	180							K/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 4.0V D.C.

3. P.C.B.mounted with 2 " x2 " (5x5 cm) copper pad areas.



RATINGS AND CHARACTERISTIC CURVES

FIG.1-Typical Forward Characteristic

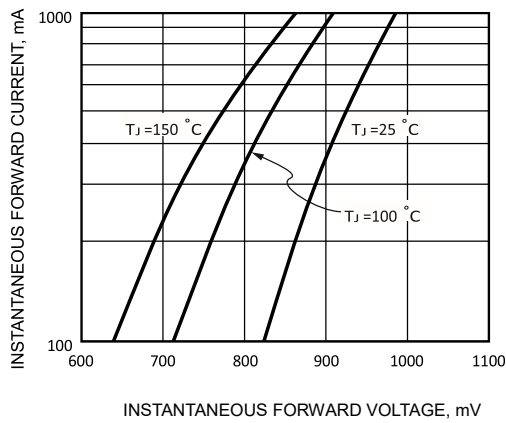


FIG.2-Typica Junction Capacitance

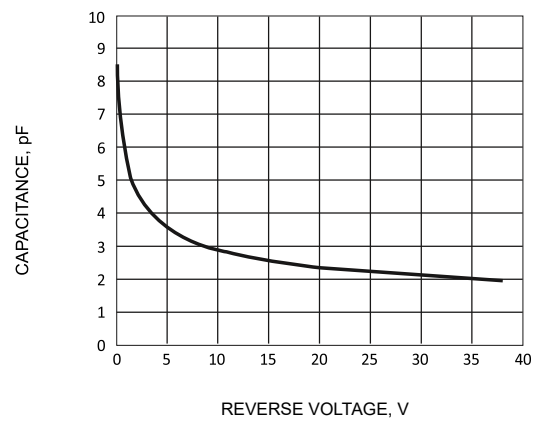


FIG.3-Typical Instantaneous Reverse Characteristics

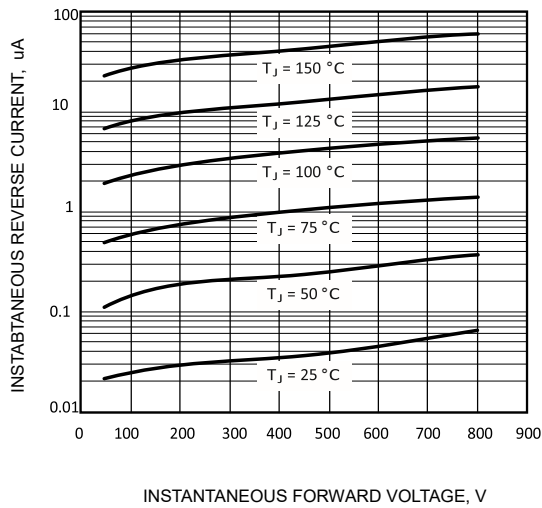
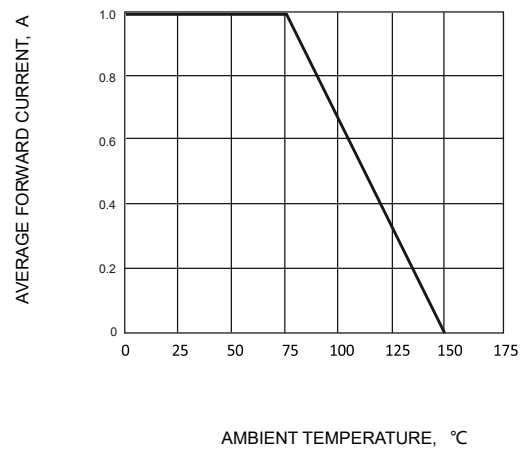


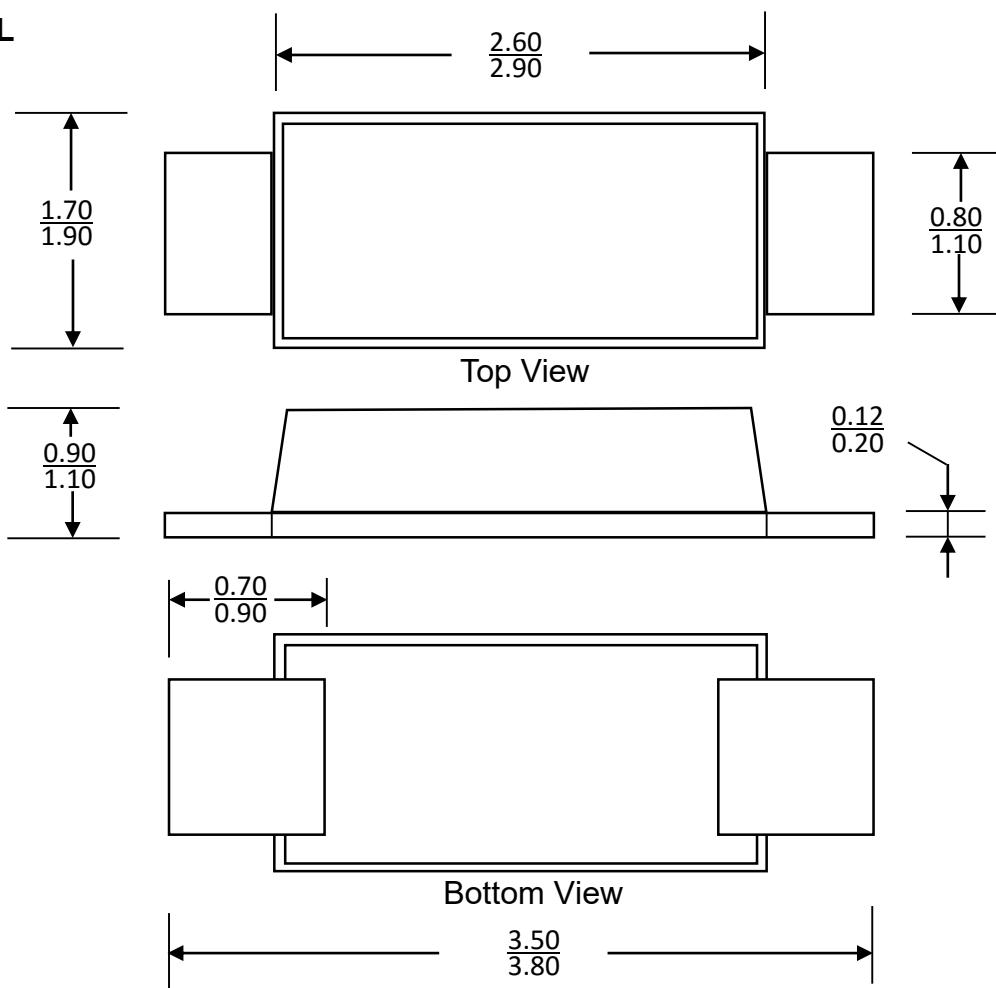
FIG.4-Forward Derating Curve





PACKAGE OUTLINE

SOD-123FL



Dimensions in millimeters

ORDERING INFORMATION

Device	Package	Shipping
DSR1AFL thru DSR1MFL	SOD-123FL	3,000/Tape & Reel (7 inches)