

**SURFACE MOUNT FAST RECOVERY RECTIFIERS***Forward Current-1.5A**Reverse Voltage-50V to 1000V***FEATURES**

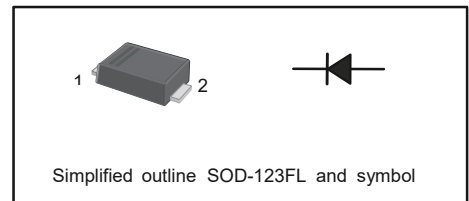
- ◆ For surface mount applications
- ◆ Glass passivated chip junction
- ◆ Low profile package
- ◆ Fast reverse recovery time
- ◆ Lead free in comply with EU RoHS2011/65/EU directives

MECHANICAL DATA

- ◆ Case: SOD-123FL molded plastic body
- ◆ Terminals: Solderable per MIL-STD-750 , Method2026
- ◆ Weight: Approximated 0.015 grams

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 derating by 20 %.

PARAMETER	SYMBOL	RS15AFL -PJ	RS15BFL -PJ	RS15DFL -PJ	RS15GFL -PJ	RS15JFL -PJ	RS15KFL -PJ	RS15MFL -PJ	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 $T_C=125^\circ\text{C}$	$I_{F(AV)}$	1.5							A
Peak Forward Surge Current (Note1)	I_{FSM}	45							A
Maximum Forward Voltage at 1.5 A	V_F	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage at $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	I_R	5 100							μA
Typical Junction Capacitance at $V_R=4\text{V}$, $f=1\text{MHz}$	C_J	22							pF
Maximum Reverse Recovery Time (Note2)	T_{rr}	150				250	500		nS
Typical Thermal Resistance (Note3)	$R_{\theta JA}$	80							$^\circ\text{C/W}$
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 with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $J_{rr}=0.25\text{A}$.

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



RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

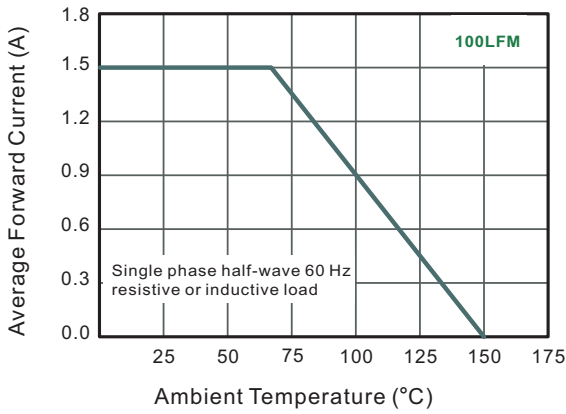


Fig.2 Typical Reverse Characteristics

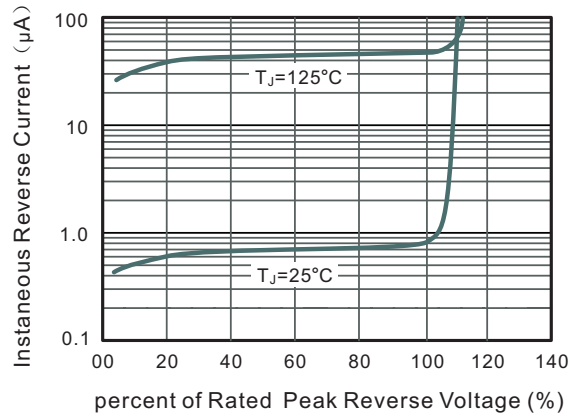


Fig.3 Typical Instantaneous Forward Characteristics

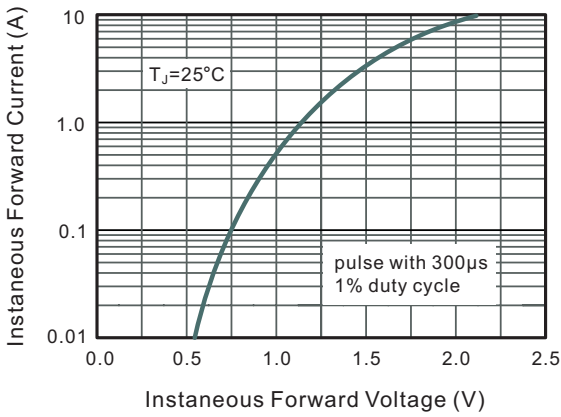


Fig.4 Typical Junction Capacitance

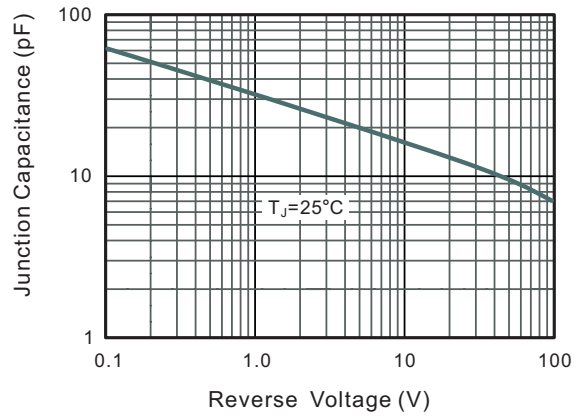
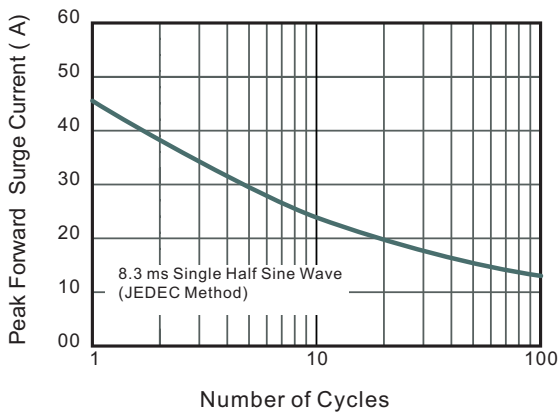


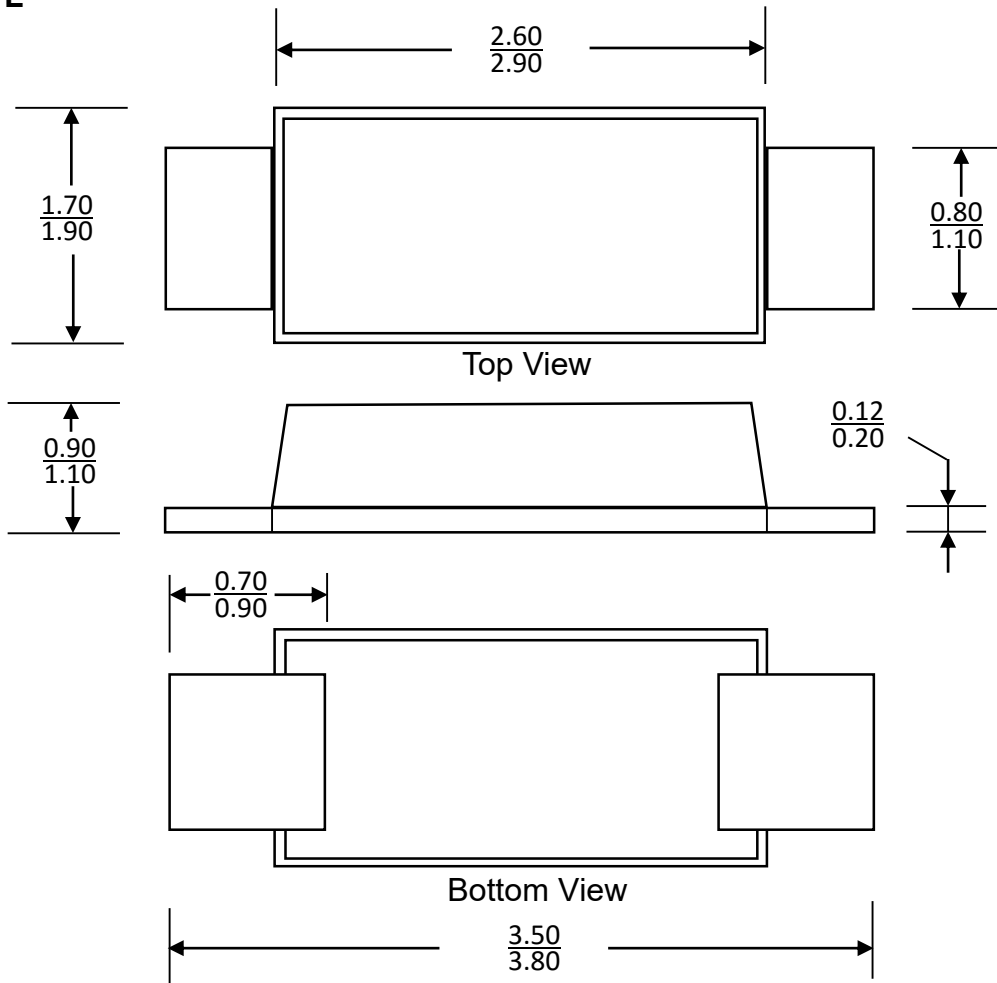
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current





PACKAGE OUTLINE

SOD-123FL



Dimensions in millimeters

ORDERING INFORMATION

Device	Package	Shipping
RS15AFL-PJ THRU RS15MFL-PJ	SOD-123FL	3,000/Tape & Reel (7 inches)