



## FEATURES

- Glass passivated device
- Ideal for surface mouted applications
- Low leakage current
- Metallurgically bonded construction
- High temperature soldering:  
/10 seconds at terminals

## Mechanical Data

Case: JEDEC SOD-123FL, molded plastic over passivated chip

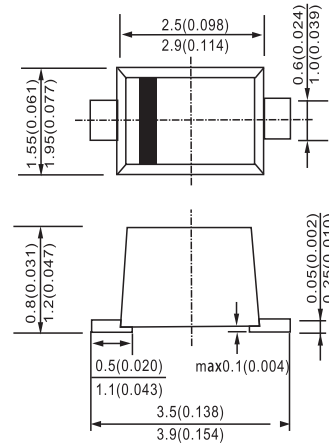
Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Weight: 0.003 ounces, 0.01 gram

Mounting position: Any

## SOD-123FL



Dimensions in millimeters

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

Single hase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

## ABSOLUTE RATINGS

		SOD1F1	SOD1F2	SOD1F4	SOD1F6	SOD1F8	SOD1F10	UNITS
Device marking code		FB	FD	FG	FJ	FK	FM	
Maximum recurrent peak reverse voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	100	200	400	600	800	1000	V
Maximum average forward rectified current $T_A=65$ (NOTE 1)	$I_{(AV)}$	1.0						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load $T_L=25$	$I_{FSM}$	25						A
Typical thermal resistance (NOTE 2)	$R_{j\theta A}$	180						K/W
Maximum reverse recovery time (NOTE 3)	$t_{rr}$	150			250	500		ns
Operating temperature range	$T_j$	- 55 --- + 150						
Storage temperature range	$T_{STG}$	- 55 --- + 150						

NOTES: 1. Averaged over any 20 ms period.

2. Thermal resistance junction to ambient, 6.0 mm<sup>2</sup> copper pads to each terminal.

3. Measured with  $I_F=0.5A$ ,  $I_R=1A$ ,  $t_{rr}=0.25A$ .



RATINGS AND CHARACTERISTIC CURVES

SOD1F1 THRU SOD1F10

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

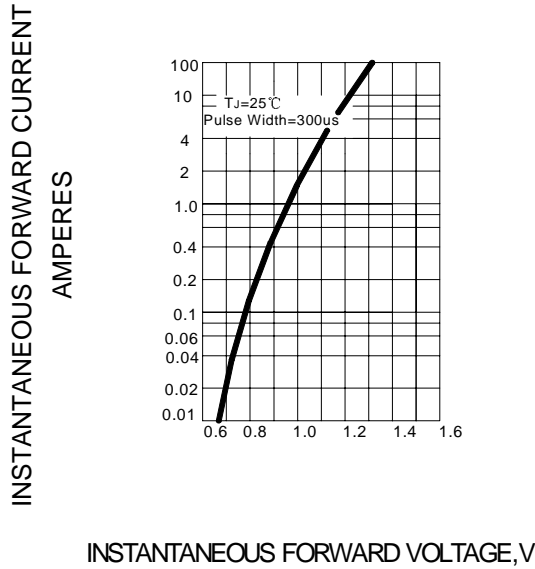


FIG.2 – TYPICAL JUNCTION CAPACITANCE

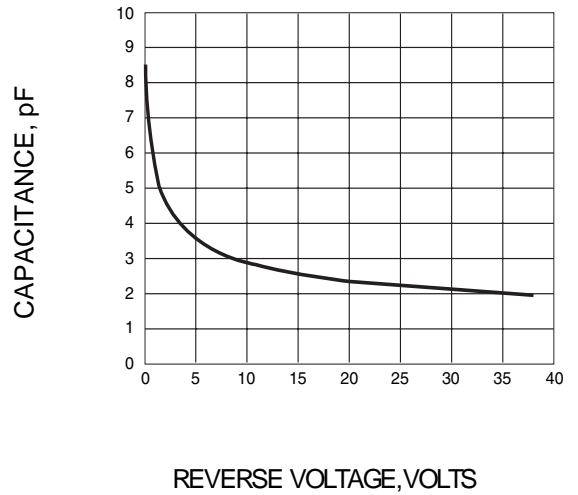


FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

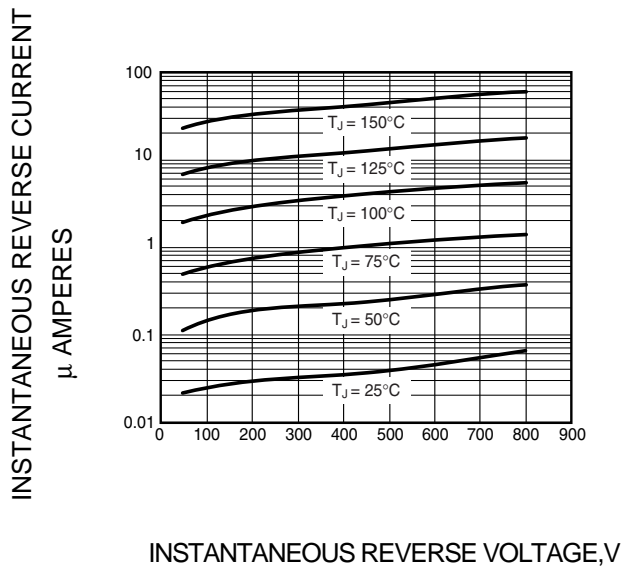


FIG.4 – FORWARD DERATING CURVE

