

Features

- ✧ Glass passivated device
- ✧ Ideal for surface mouted applications
- ✧ Low leakage current
- ✧ Metallurgically bonded construction
- ✧ High temperature soldering:
250°C/10 seconds at terminals

Mechanical Data

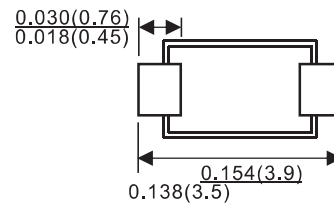
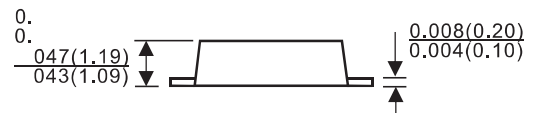
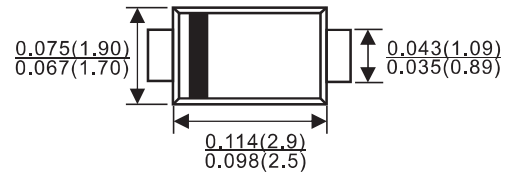
- ✧ Case: JEDEC SOD-123FL, molded plastic over passivated chip
- ✧ Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
- ✧ Polarity: Color band denotes cathode end
- ✧ Weight: 0.0008 ounces, 0.022 gram
- ✧ Mounting position: Any



REVERSE VOLTAGE: 100 - 1000 V

CURRENT: 1.0 A

SOD-123FL



Dimensions in inches and(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

		FM 101	FM 102	FM 103	FM 104	FM 105	FM 106	FM 107	UNITS
Device marking code		F1	F2	F3	F4	F5	F6	F7	
Maximum recurrent 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 @ $T_A=75$	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	30							A
Maximum instantaneous forward voltage @ $I_{FM}=1.0A$ (Note 1)	V_F	1.15							V
Maximum DC reverse current @ $T_A=25$ at rated DC blocking voltage @ $T_A=125$	I_R	5 50							μA
Maximum reverse recovery time	T_{rr}	150			250	500			ns
Typical junction capacitance measured at $f=1MHz, V_R=4.0V$	C_J	4							p F
Typical thermal resistance junction to lead	$R_{\theta JL}$	20							/W
Operating temperature range	T_j	- 55 --- + 150							
Storage temperature range	T_{STG}	- 55 --- + 150							

NOTE1.Pulse test: pulse width 300 μ sec,duty cycle 2%.

Ratings AND Characteristic Curves

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

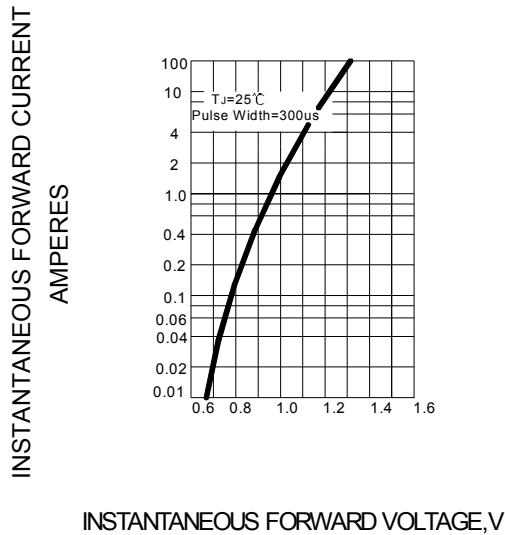


FIG.2 – TYPICAL JUNCTION CAPACITANCE

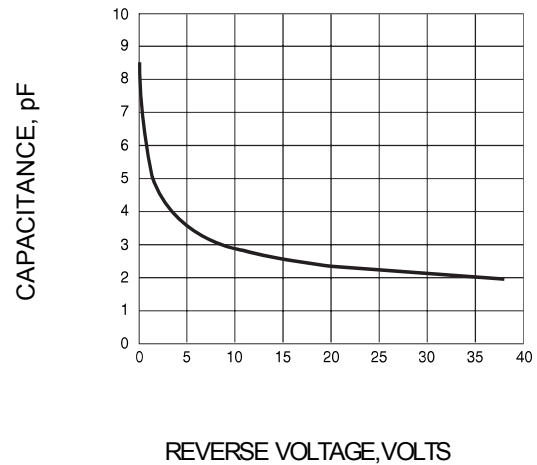


FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

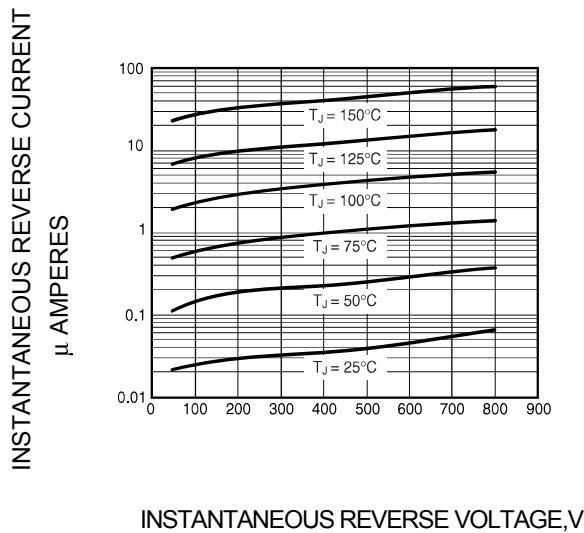


FIG.4 – FORWARD DERATING CURVE

