

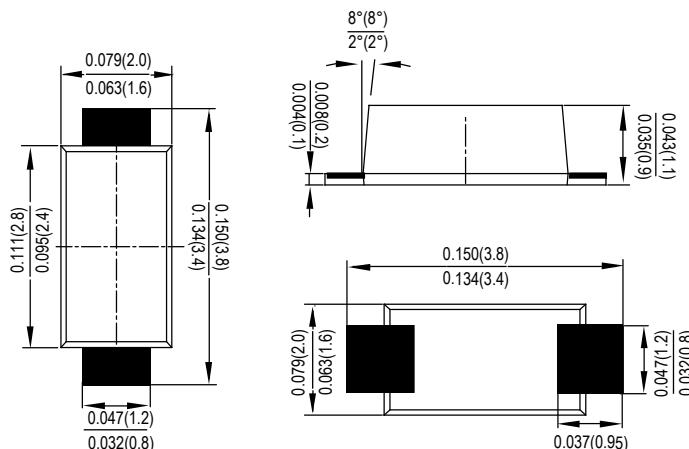
Features

- Glass passivated die construction
- Ideal for surface mounted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed:
260°C/10 seconds, 0.375"(9.5mm) lead length,
5 lbs. (2.3kg) tension
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: SOD-123FL, molded plastic
- Terminals: plated leads solderable per
MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

SOD-123FL



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	F1	F2	F3	F4	F5	F6	F7	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _R RM	50	100	200	400	600	800	1000	V
	V _R WM								
	V _{DC}								
RMS Reverse Voltage	V _R RMS	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _L = 90°C	I _F (AV)					1.0			A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FS} M					30			A
I ² t Rating for Fusing (t < 8.3ms)	I ² t				3.735				A ² s
Forward Voltage per element @I _F =1.0A	V _{FM}				1.3				V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125 °C	I _R				5.0	100			uA
Maximum reverse recovery time (NOTE 1)	trr			150		250	500		ns
Typical junction capacitance (NOTE 2)	C _J			15					pF
Operating and Storage Temperature Range	T _J , T _{STG}			-55 to +150					°C

Note:1. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

FIG. 1- FORWARD CURRENT DERATING CURVE

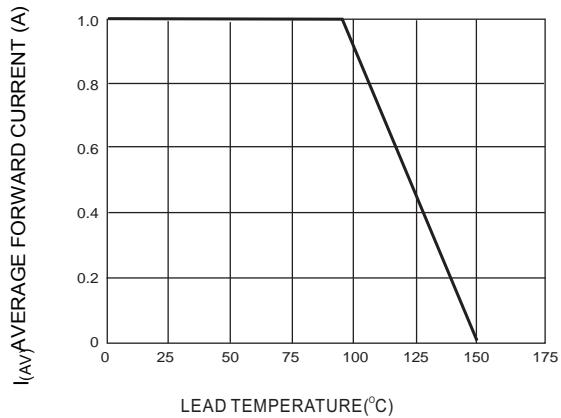


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

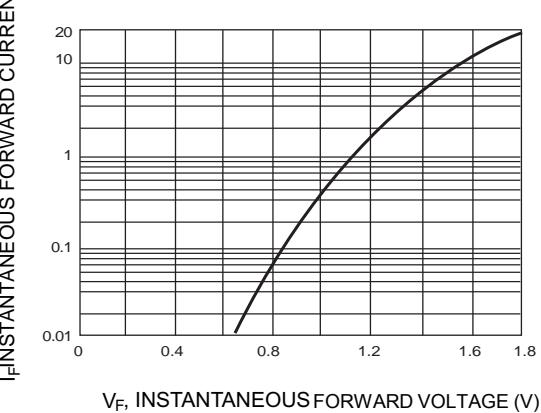


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

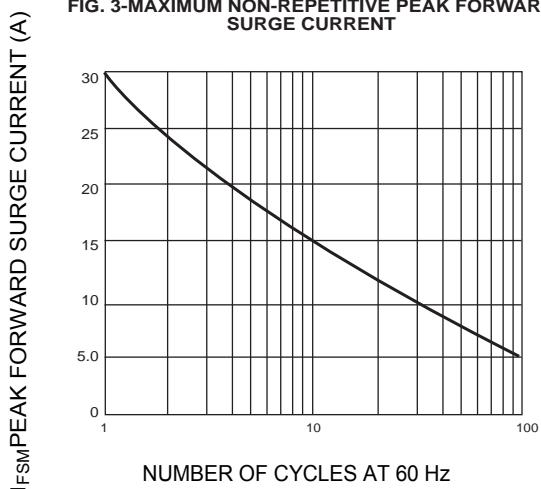


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

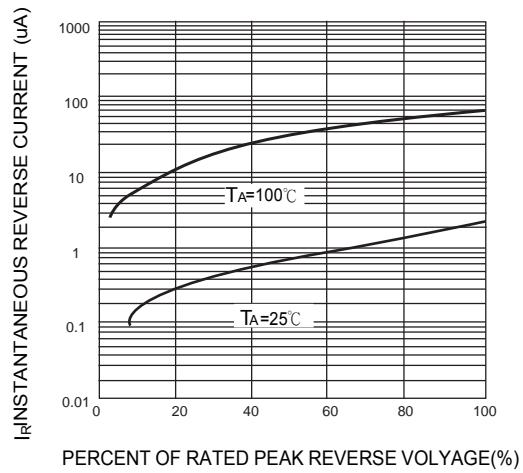


Fig.5 TYPICAL CAPACITANCE

