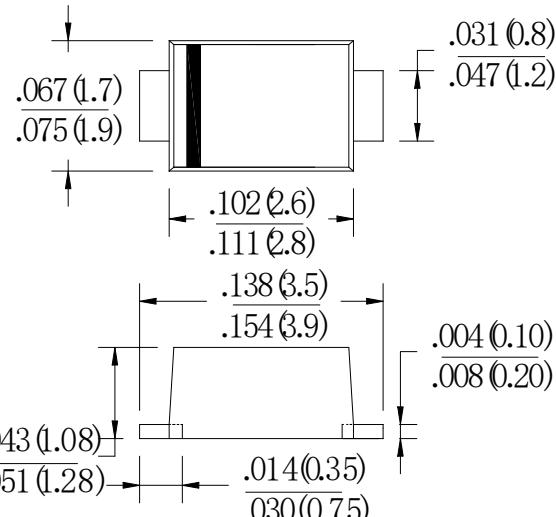


Features	Case: SOD-123FL
<ul style="list-style-type: none"> Glass passivated die construction Ideal for surface mounted applications Low reverse leakage Metallurgically bonded construction High temperature soldering guaranteed: 260°C/10 seconds, 0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension Plastic material-UL flammability 94V-0 	 <p>Dimensions in inches and (millimeters)</p>
Mechanical Data	<ul style="list-style-type: none"> Case: SOD-123FL, molded plastic Terminals: plated leads solderable per MIL-STD-750, Method 2026 Polarity: Color band denotes cathode end Mounting position: Any

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	S1AL	S1BL	S1DL	S1GL	S1JL	S1KL	S1ML	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
	V _{RWM}								
	V _{DC}								
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _L = 75°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 _{FSM}	30							A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	3.735							A ² s
Maximum Instantaneous Forward Voltage at 1 A	V _{FM}	1.1							V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125 °C	I _R	5.0 200							uA
Typical Junction Capacitance (Note 1)	C _J	10							pF
Typical thermal resistance (Note 2)	R _{θJA}	180							°C/W
Operating and Storage Temperature Range	T _{J,T_{STG}}	-55 to +150							°C

Note:1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C.

2. Measured on P.C. Board with 0.2x0.2"(5.0x5.0mm)Copper Pad Area

Fig. 1 Typical Forward Current Derating Curve

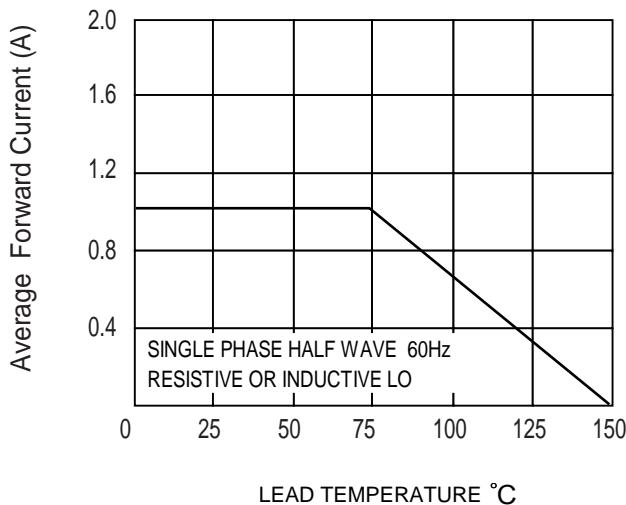


Fig. 2 Typical Instantaneous Forward Characteristics

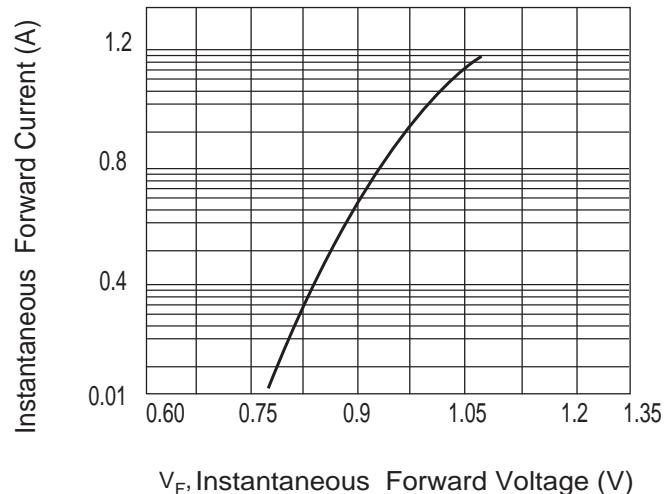


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

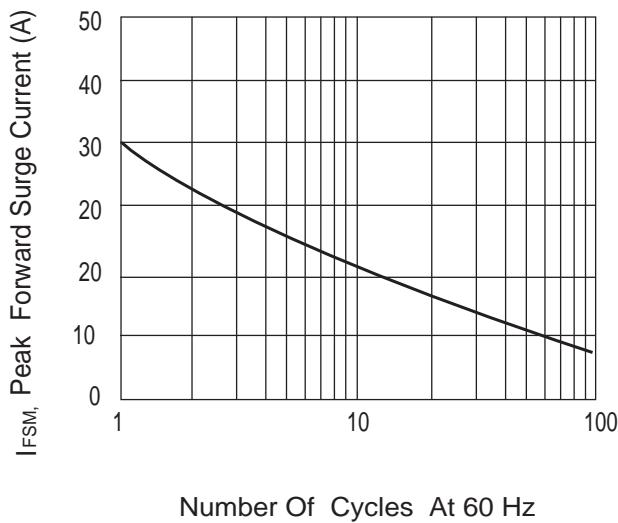


Fig.4 Typical Reverse Characteristics

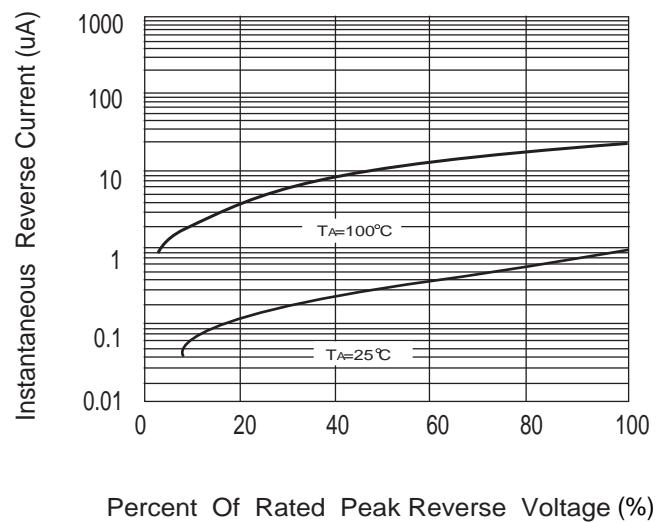


Fig.5 Typical Capacitance

