

Features	Case: SOD-123FL
<ul style="list-style-type: none"> • Glass passivated die construction • Ideal for surface mouted 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 style="text-align: center;">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	A1	A2	A3	A4	A5	A6	A7	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM}								
	V_{RWM}	50	100	200	400	600	800	1000	V
	V_{DC}								
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_L = 75^\circ C$	$I_{F(AV)}$	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^2t Rating for Fusing ($t < 8.3ms$)	I^2t	3.735							A ² s
Maximum Instantaneous Forward Voltage at 1 A	V_{FM}	1.1							V
Peak Reverse Current @ $T_A = 25^\circ C$	I_R	5.0							uA
At Rated DC Blocking Voltage @ $T_A = 125^\circ C$		200							
Typical Junction Capacitance (Note 1)	C_J	10							pF
Typical thermal resistance (Note 2)	$R_{\theta JA}$	180							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55to+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

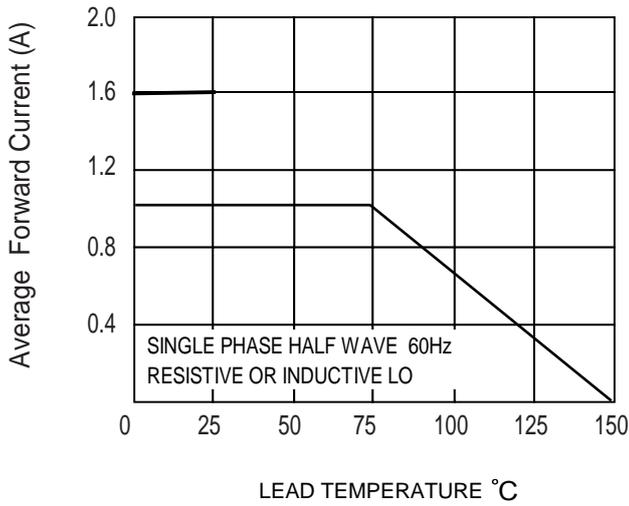


Fig. 2 Typical Instantaneous Forward Characteristics

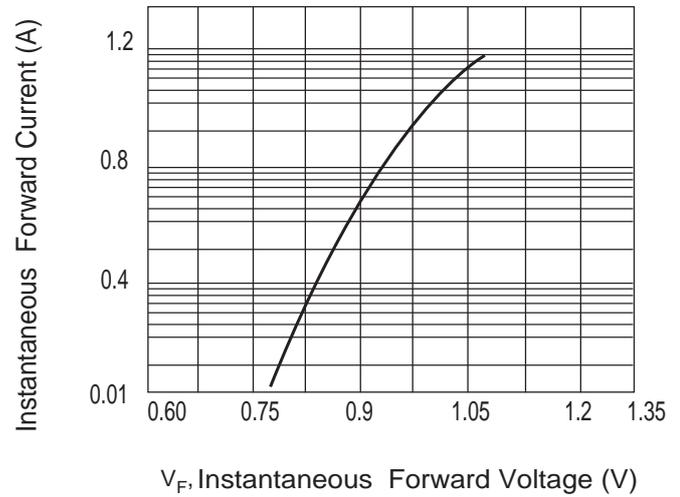


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

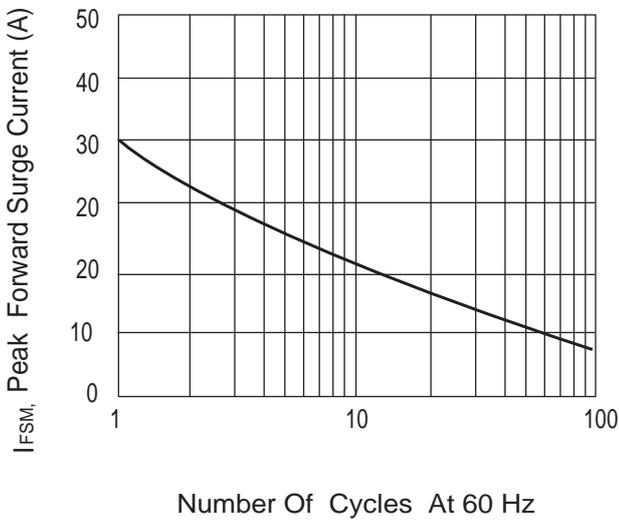


Fig.4 Typical Reverse Characteristics

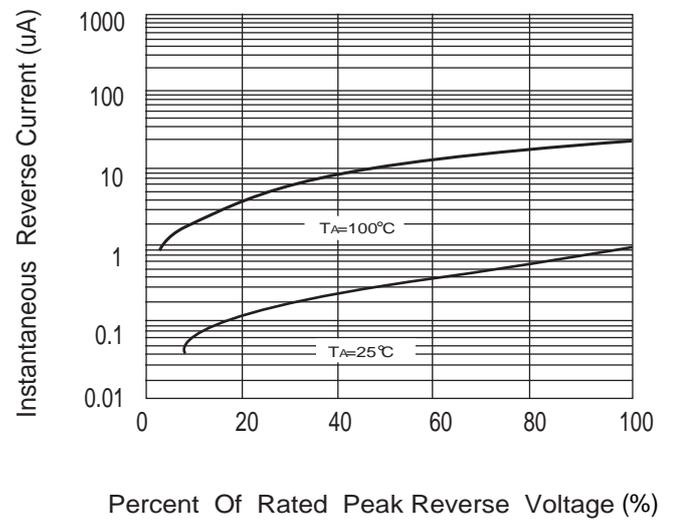


Fig.5 Typical Capacitance

