

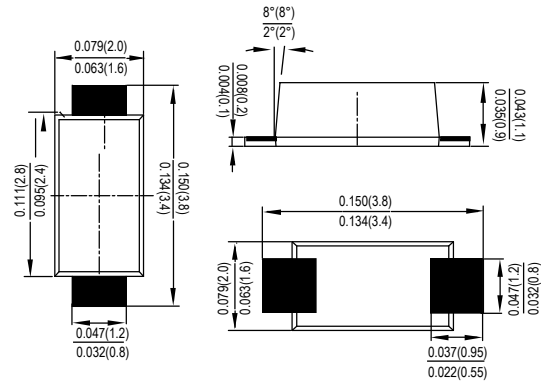
### Features

- 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



### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

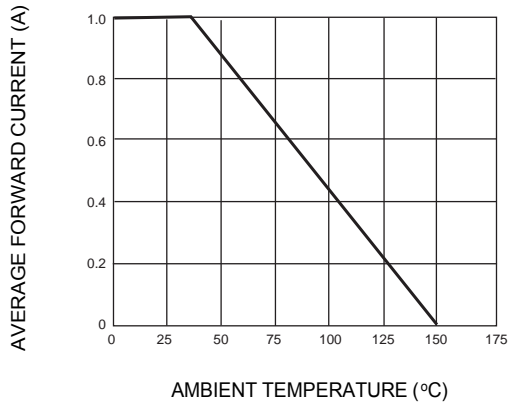
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	A1	A2	A3	A4	A5	A6	A7	UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$								
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	V
DC Blocking Voltage	$V_{DC}$								
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_A = 30^\circ C$	$I_o$	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
Forward Voltage per element @ $I_F = 1.0A$	$V_{FM}$	1.1							V
Peak Reverse Current @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 100^\circ C$	$I_R$	5.0 100							$\mu A$
Typical thermal resistance (NOTE 1)	$R_{\theta JA}$	180							$^\circ C/W$
Typical junction capacitance (NOTE 2)	$C_J$	4							pF
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150							$^\circ C$

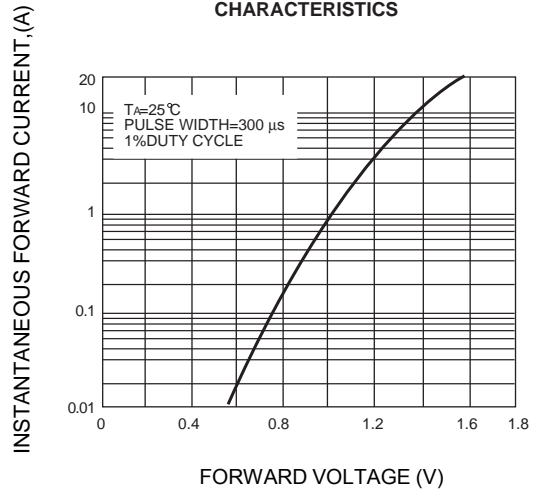
Note: 1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

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

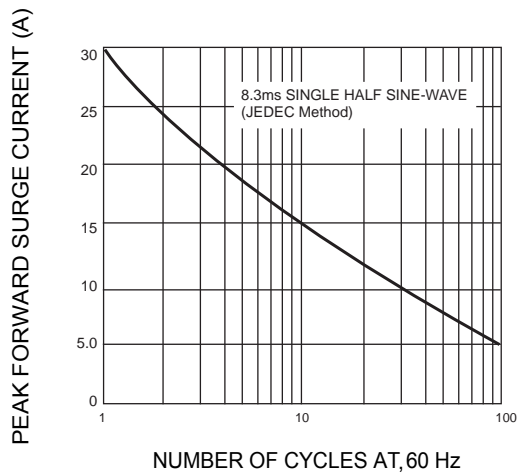
**FIG. 1- FORWARD CURRENT DERATING CURVE**



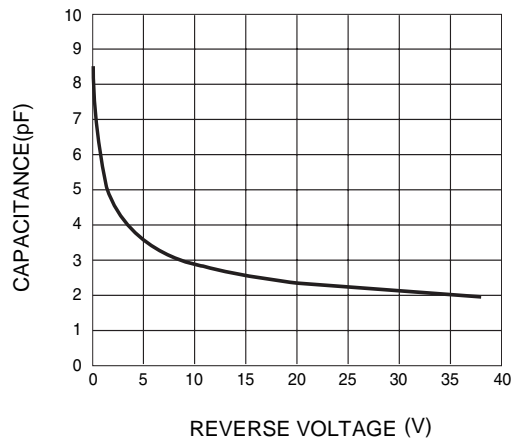
**FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



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



**FIG. 4-TYPICAL JUNCTION CAPACITANCE**



**FIG. 5 TYPICAL REVERSE CHARACTERISTICS**

