



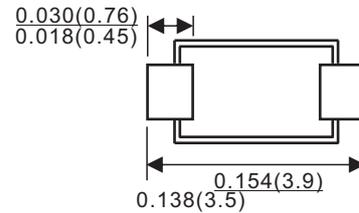
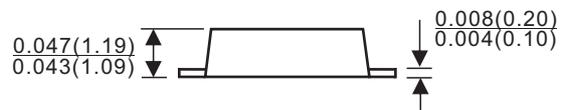
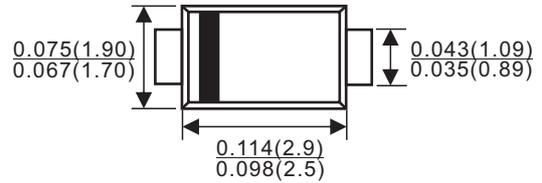
SOD-123FL

### Features

- ◇ Low profile space
- ◇ Ideal for automated placement
- ◇ Glass passivated chip junctions
- ◇ Low forward voltage drop
- ◇ Low leakage current
- ◇ High forward surge capability
- ◇ High temperature soldering:  
260°C/10 seconds at terminals
- ◇ Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

### Mechanical Date

- ◇ **Case:** JEDEC SOD-123FL molded plastic body over glass passivated chip
- ◇ **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- ◇ **Polarity:** Laser band denotes cathode end



Dimensions in inches and(millimeters)

### Maximum Ratings & Thermal Characteristics & Electrical Characteristics

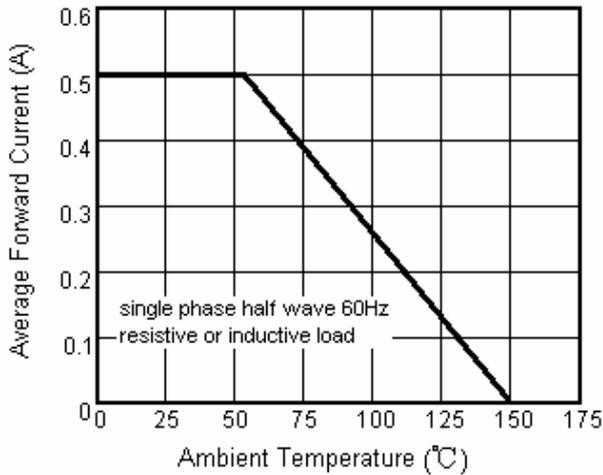
( $T_A = 25\text{ }^\circ\text{C}$  unless otherwise noted)

Type Number	Symbol	DSR 0.5A	DSR 0.5B	DSR 0.5D	DSR 0.5G	DSR 0.5J	DSR 0.5K	DSR 0.5M	UNIT
Marking code		<b>0.5A</b>	<b>0.5B</b>	<b>0.5D</b>	<b>0.5G</b>	<b>0.5J</b>	<b>0.5K</b>	<b>0.5M</b>	
Maximum repetitive 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	$I_{F(AV)}$	0.5							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	15							A
Maximum instantaneous forward voltage at 0.5A	$V_F$	1.1							V
Maximum DC reverse current $T_A = 25\text{ }^\circ\text{C}$ at Rated DC blocking voltage $T_A = 100\text{ }^\circ\text{C}$	$I_R$	5.0 50							$\mu\text{A}$
Typical junction capacitance at 4.0 V ,1MHz	$C_J$	14							pF
Operating junction and storage temperature range	$T_J, T^{STG}$	-55 to +150							$^\circ\text{C}$

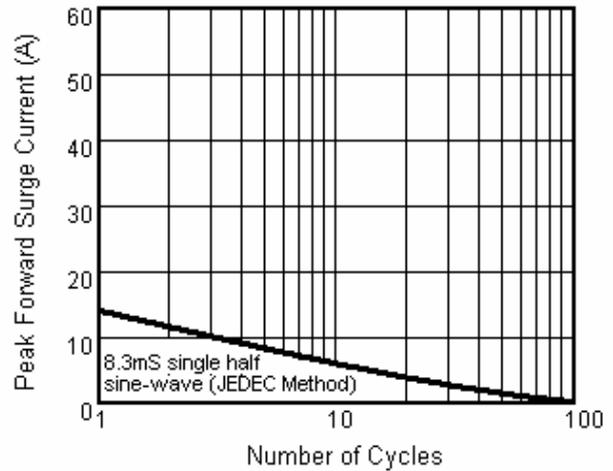


Characteristic Curves ( $T_A=25\text{ }^\circ\text{C}$  unless otherwise noted)

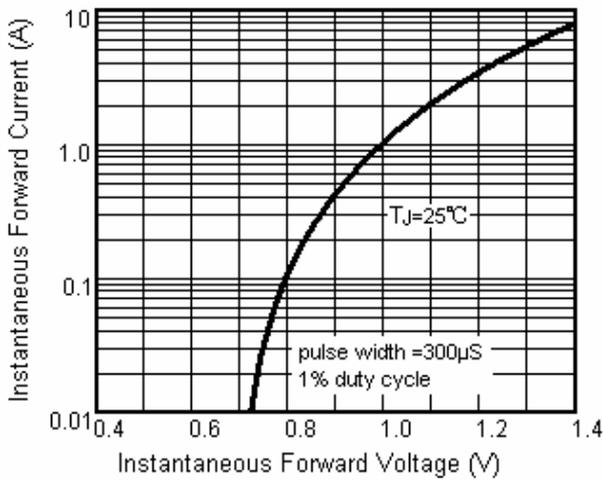
**Fig.1 Forward Current Derating Curve**



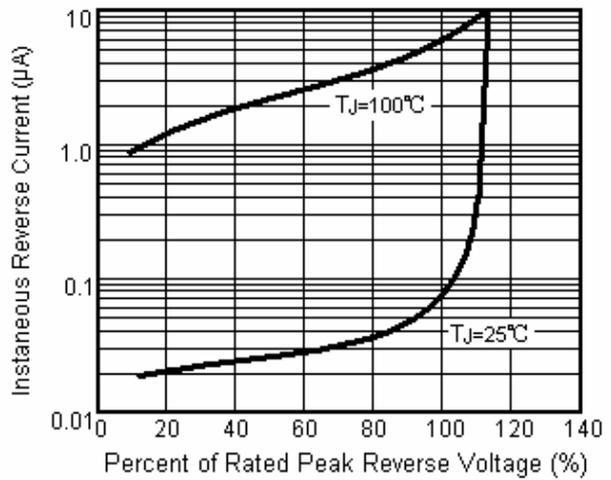
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



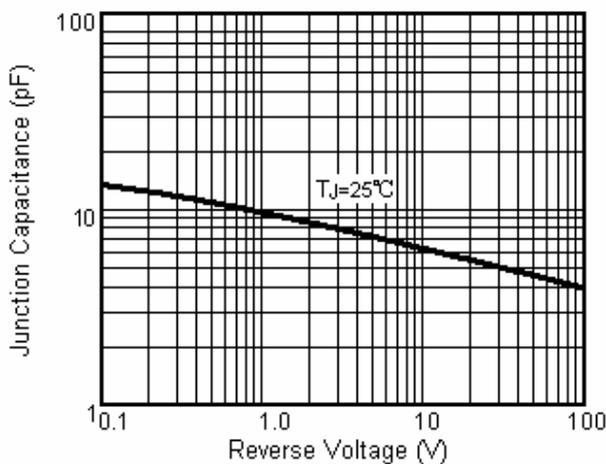
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Reverse Characteristics**



**Fig.5 Typical Junction Capacitance**



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SOD-123FL	3000/REEL	90000	40X20X22	5.00	4.00