



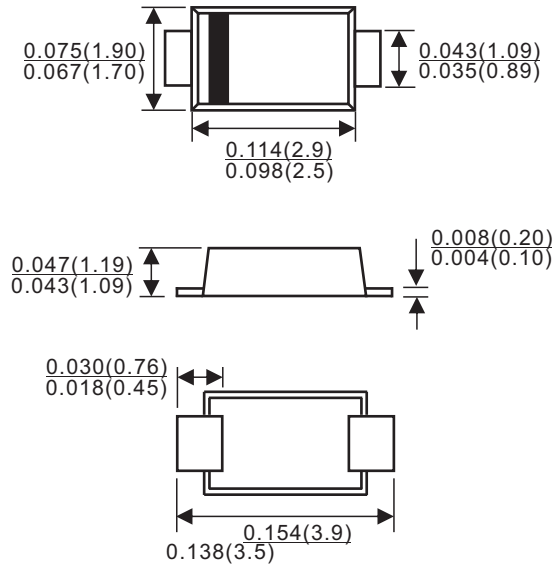
Features

- ✧ 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
- ✧ **Weight:** 0.017gram

SOD-123FL



Maximum Ratings & Thermal Characteristics & Electrical Characteristics

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

Parameter	Symbol	DFR	DFR	DFR	DFR	DFR	DFR	DFR	UNIT
		0.5A	0.5B	0.5D	0.5G	0.5J	0.5K	0.5M	
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	1.3							V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at Rated DC blocking voltage $T_A = 100^\circ\text{C}$	I_R	5.0 50							μA
Maximum reverse recovery time at $I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{rr} = 0.25\text{ A}$	t_{rr}	150			250		500		nS
Typical junction capacitance at 4.0 V, 1MHz	C_J	15							p F
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$



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

Fig.1 Forward Current Derating Curve

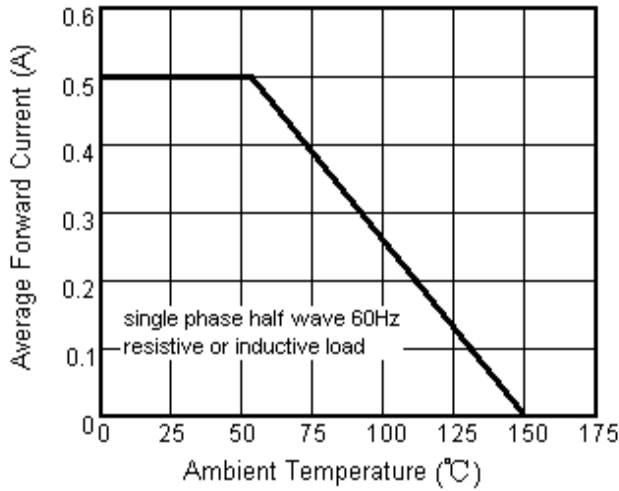


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

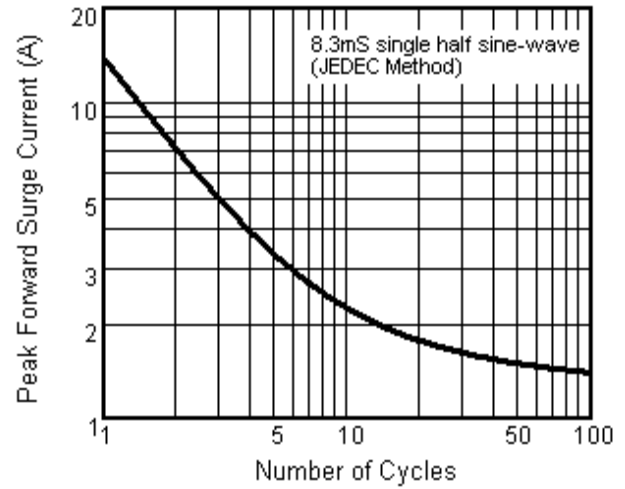


Fig.3 Typical Instantaneous Forward Characteristics

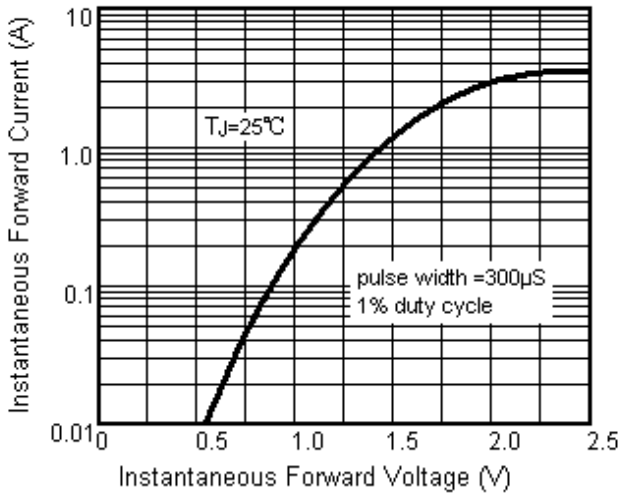


Fig.4 Typical Reverse Characteristics

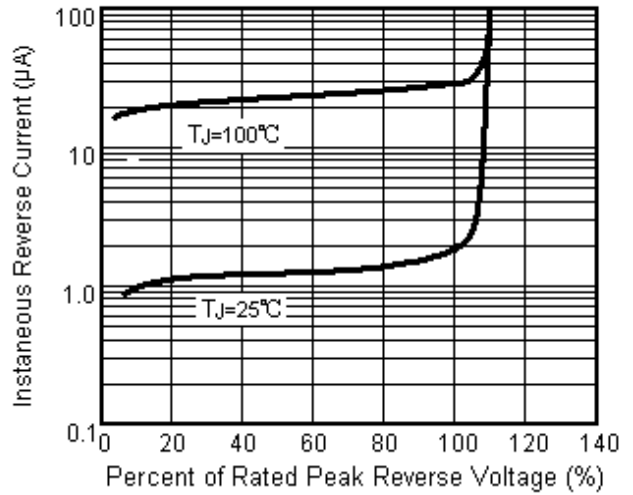
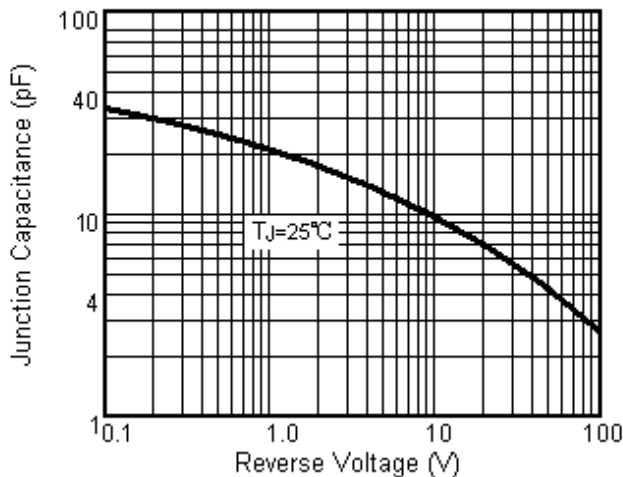


Fig.5 Typical Junction Capacitance



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