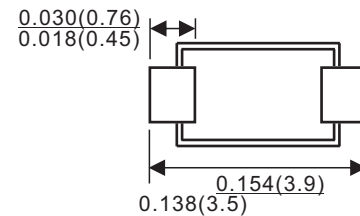
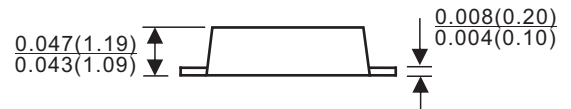
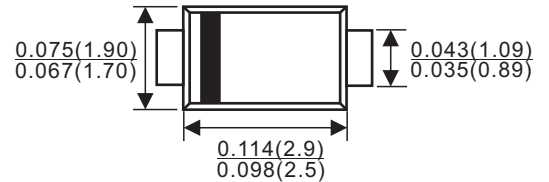




SOD-123FL

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



Dimensions in inches and (millimeters)

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

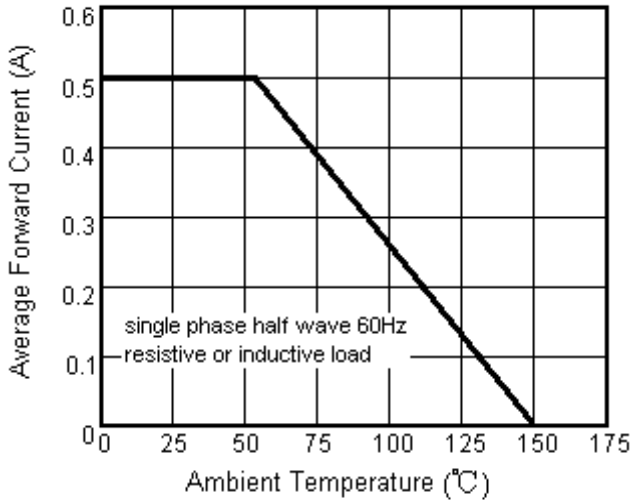
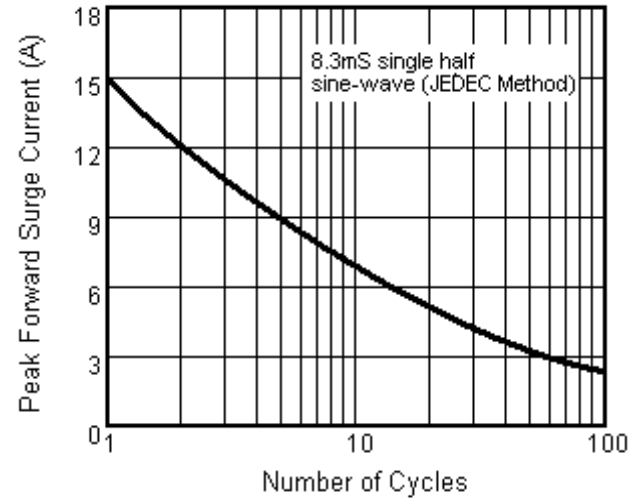
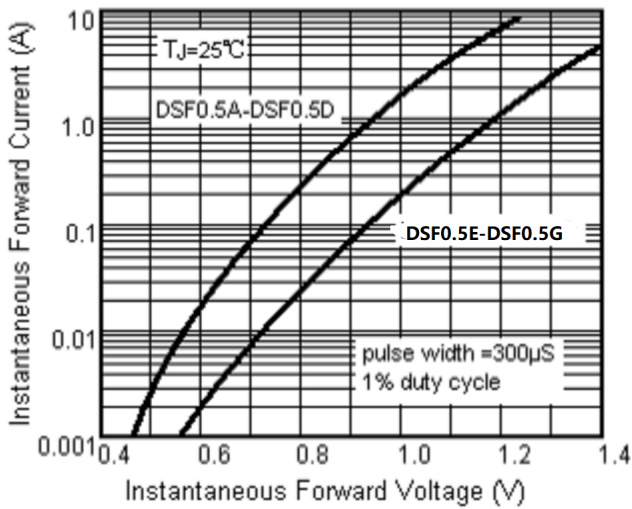
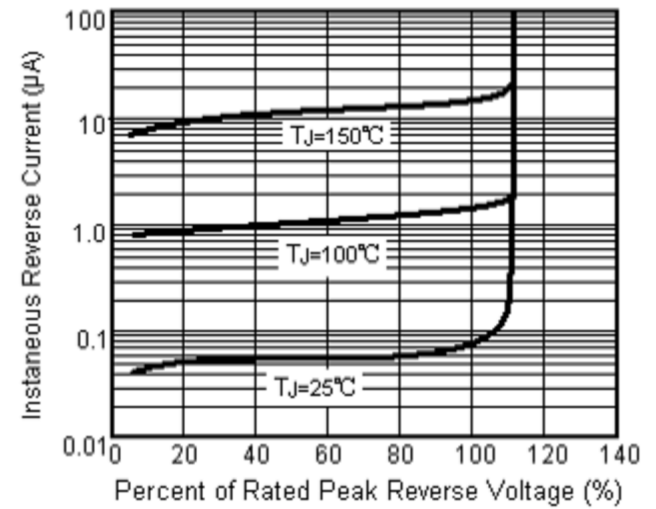
Maximum Ratings & Thermal Characteristics & Electrical Characteristics

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

Parameter	Symbol	DSF 0.5A	DSF 0.5D	DSF 0.5C	DSF 0.5D	DSF 0.5E	DSF 0.5G	
Marking code		0.5A	0.5B	0.5C	0.5D	0.5E	0.5G	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	300	400	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	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	0.95				1.25		V
Maximum DC reverse current at Rated DC blocking voltage	I_R	$T_A = 25^\circ\text{C}$ 5.0				$T_A = 100^\circ\text{C}$ 100		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}	35						nS
Typical thermal resistance	$R_{\theta JA}$	150						$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150						$^\circ\text{C}$

Note1: Mounted on FR-4 P.C.B. With 0.9x1.5 mm copper pad areas ($\approx 35\ \mu\text{m}$ thick)


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


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