



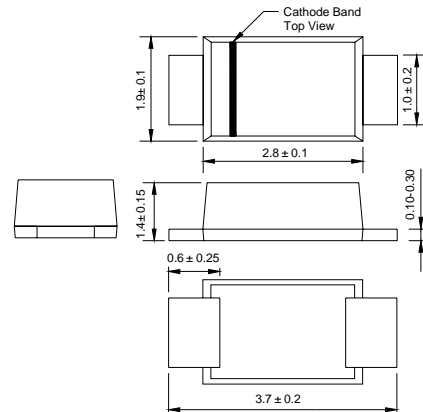
Features

- 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



Dimensions in millimeters

Maximum Ratings & Thermal Characteristics & Electrical Characteristics

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

	DSF-	Symbol	0.5A	0.5B	0.5C	0.5D	0.5F	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	5.0 100						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

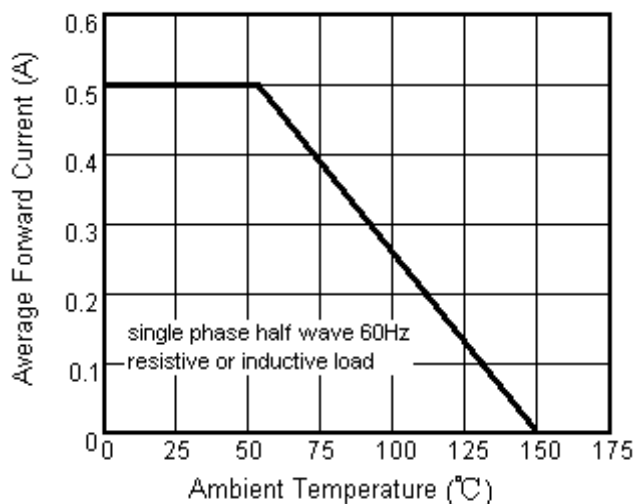


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

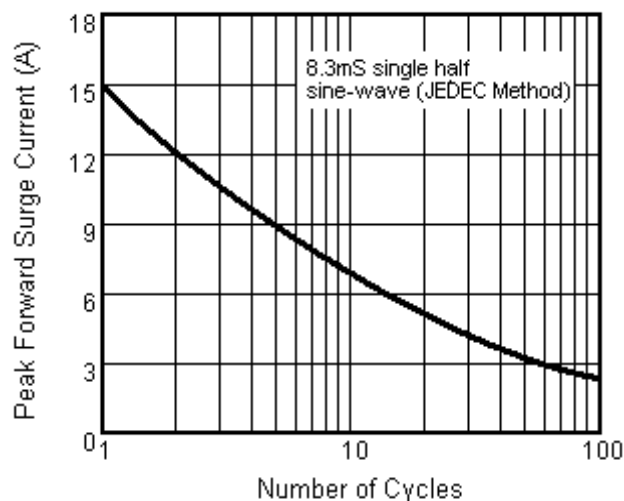


Fig.3 Typical Instantaneous Forward Characteristics

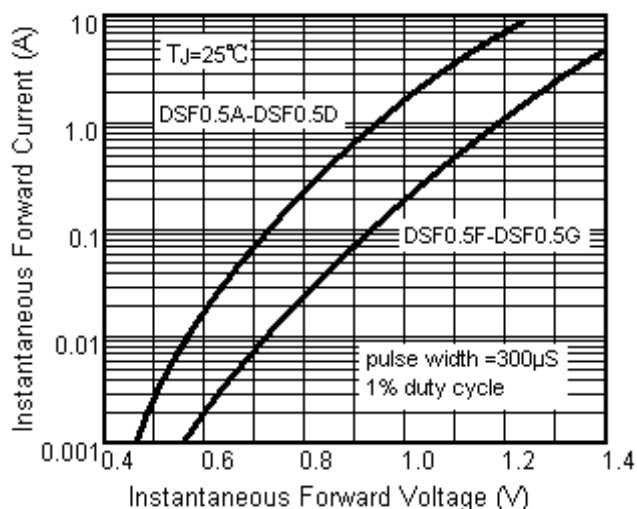


Fig.4 Typical Reverse Characteristics

