



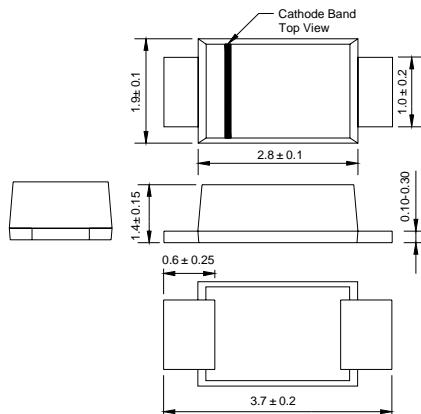
Features

- 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 Data

- **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

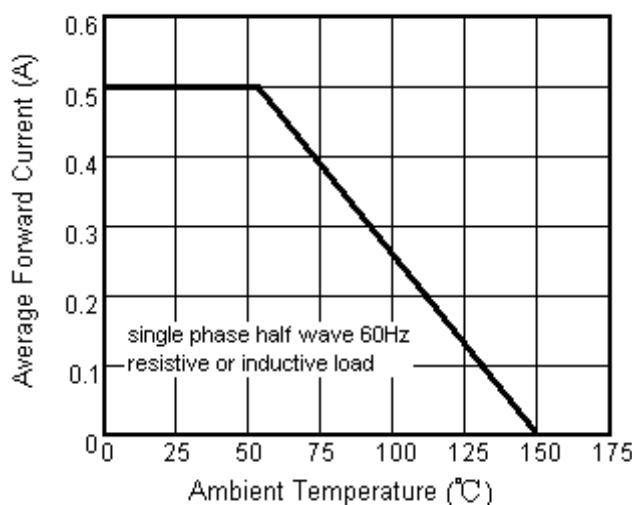
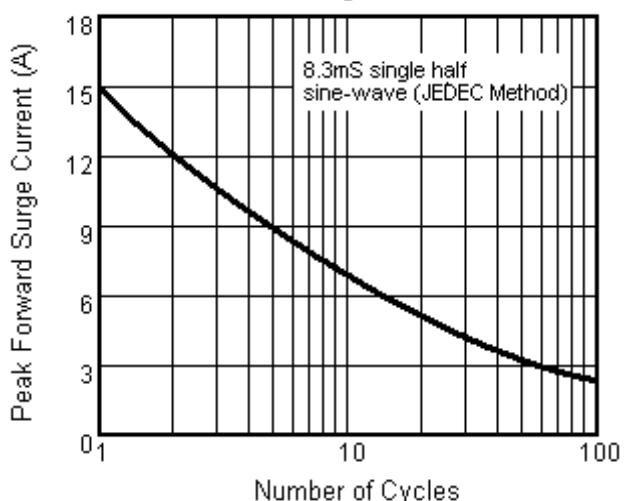
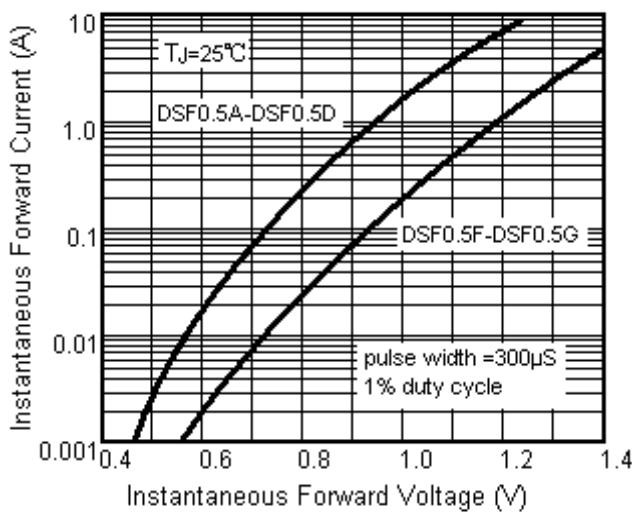
Maximum Ratings & Thermal Characteristics & Electrical Characteristics

(T_A = 25 °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 T _A = 25 °C at Rated DC blocking voltage T _A = 100 °C	I _R			5.0	100			µ A
Maximum reverse recovery time at I _F = 0.5 A , I _R = 1.0 A , I _{rr} = 0.25 A	t _{rr}			35				nS
Typical thermal resistance	R _{θJA}			150				°C/W
Operating junction and storage temperature range	T _J , T _{STG}			-55 to +150				°C

Note1: Mounted on FR-4 P.C.B. With 0.9x1.5 mm copper pad areas (≈35 µm 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
