



DBL0.3J~DBL0.3M

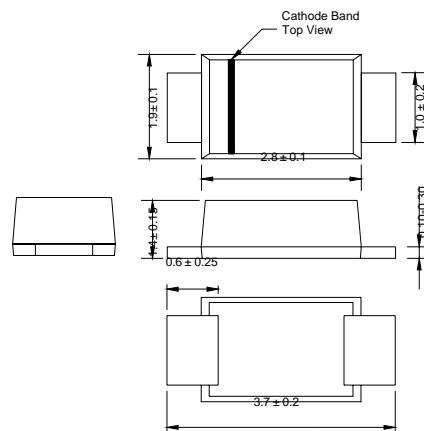
Surface Mount Diode



Features

- Low profile space
- Ideal for automated placement
- Glass passivated chip junctions
- 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

SOD-123FL



Dimensions in millimeters

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

Maximum Ratings & Thermal Characteristics

(T_A = 25 °C unless otherwise noted)

Items	Symbol	DBL0.3J	DBL0.3K	DBL0.3M	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	600	800	1000	V
Maximum RMS voltage	V _{RMS}	420	560	700	V
Maximum DC blocking voltage	V _{DC}	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}		0.3		A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}		15		A
Thermal resistance from junction to ambient ⁽¹⁾	R _{θJA}		220		°C / W
Operating junction and storage temperature range	T _J , T _{STG}		-55 to +150		°C

Note 1: Mounted on P.C.B. with 0.036 x 0.06" (0.9 x 1.5mm) copper pad areas.

Electrical Characteristics (T_A = 25 °C unless otherwise noted)

Items	Test conditions	Symbol	Min	Type	Max	UNIT
Instantaneous forward voltage	I _F =0.3A ⁽²⁾	V _F	-	0.95	1.10	V
Reverse current	V _R =V _{DC}	I _R	-	-	2	μA
					50	

Note2: Pulse test:300μs pulse width,1% duty cycle.



DBL0.3J~DBL0.3M

Surface Mount Diode

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

Fig.1 Forward Current Derating Curve

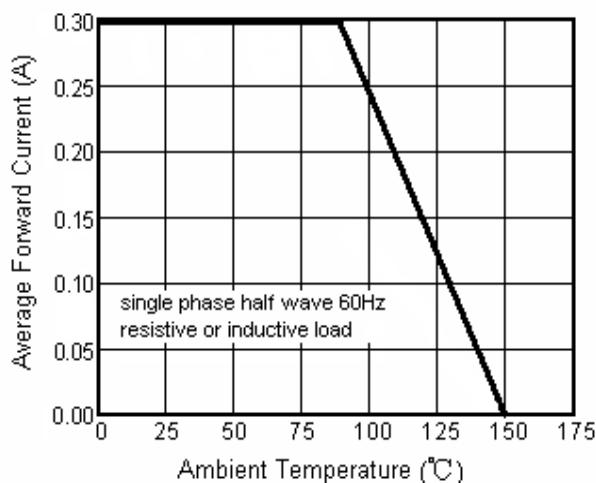


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

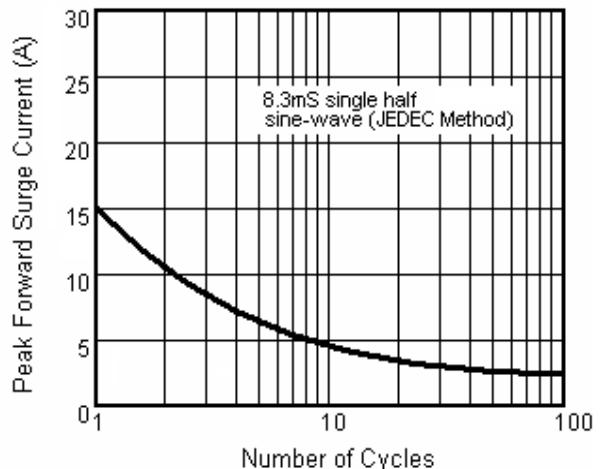


Fig.3 Typical Instantaneous Forward Characteristics

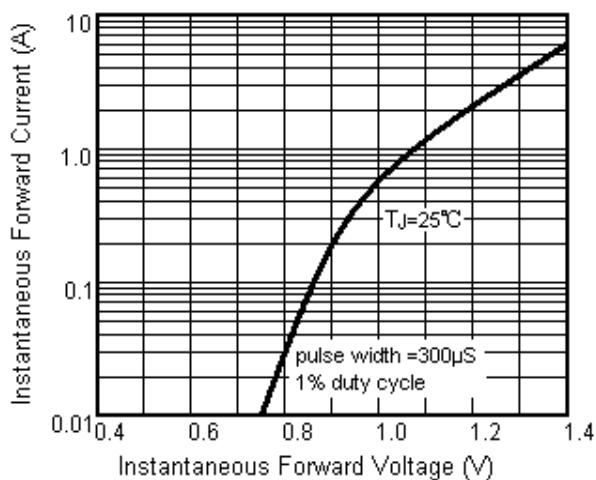


Fig.4 Typical Reverse Characteristics

