

### Major Ratings and Characteristics

$I_{F(AV)}$	0.3 A
$V_{RRM}$	50 V to 1000 V
$I_{FSM}$	10A
$I_R$	5 $\mu$ A
$V_F$	1.3V
$T_j \text{ max.}$	150 °C

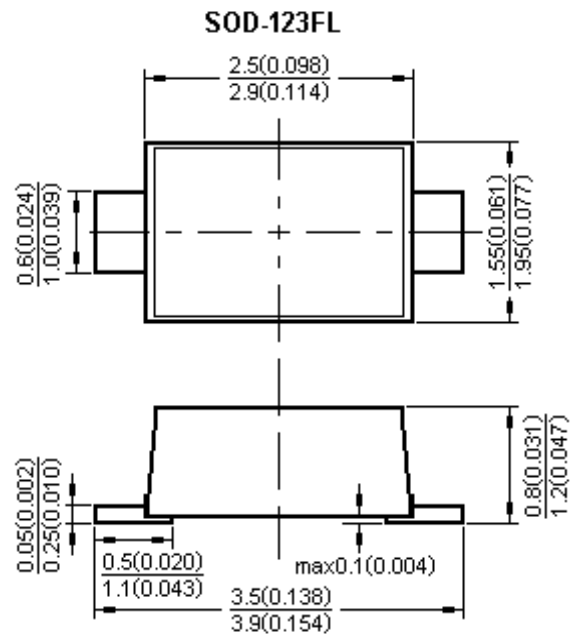


### Features

- 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



Dimensions in millimeters and (inches)

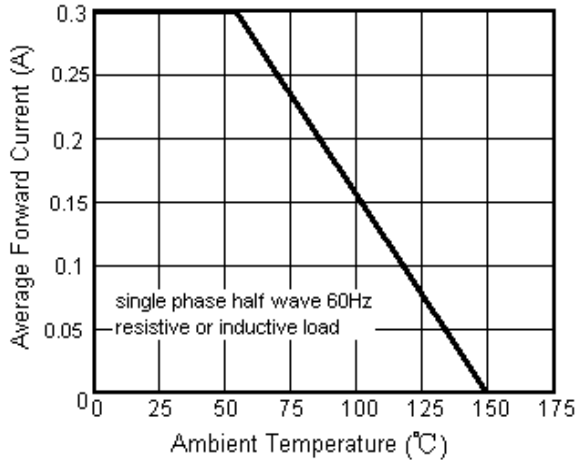
### Maximum Ratings & Thermal Characteristics & Electrical Characteristics

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

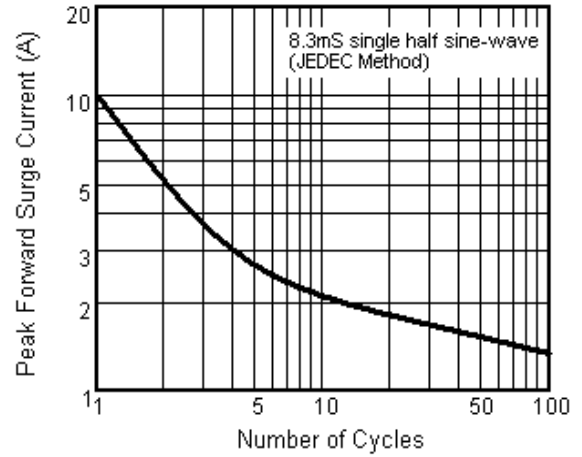
	Symbol	DFR 0.3A	DFR 0.3B	DFR 0.3D	DFR 0.3G	DFR 0.3J	DFR 0.3K	DFR 0.3M	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	0.3							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	$I_{FSM}$	10							A
Maximum instantaneous forward voltage at 0.3A	$V_F$	1.3							V
Maximum DC reverse current $T_A = 25\text{ °C}$ at Rated DC blocking voltage $T_A = 100\text{ °C}$	$I_R$	5.0 50							$\mu$ A
Maximum reverse recovery time at $I_F = 0.3\text{ A}$ , $I_R = 1.0\text{ A}$ , $I_{rr} = 0.25\text{ A}$	$t_{rr}$	150				250	500		nS
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							°C

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

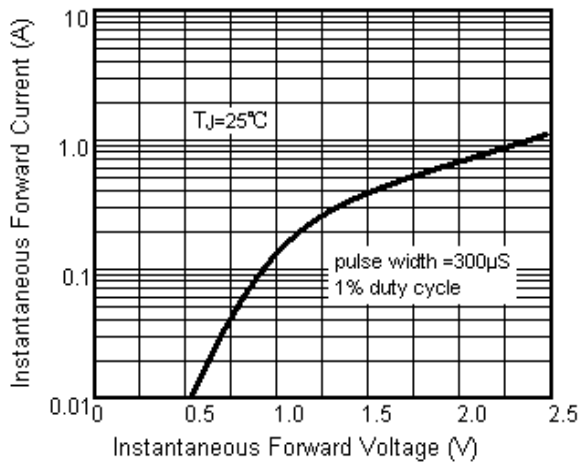
**Fig.1 Forward Current Derating Curve**



**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Reverse Characteristics**

