

### Major Ratings and Characteristics

|             |                                 |
|-------------|---------------------------------|
| $I_{F(AV)}$ | 2.0 A                           |
| $V_{RRM}$   | 20 V to 100 V                   |
| $I_{FSM}$   | 40 A                            |
| $V_F$       | 0.50V , 0.55 V , 0.70 V , 0.85V |
| $T_j$ max.  | 125 °C                          |



### Features

- Low profile package
- Ideal for automated placement
- Ultrafast reverse recovery time
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- High temperature soldering:  
260°C/10 seconds at terminals
- Component in accordance to  
RoHS 2002/95/1 and WEEE 2002/96/EC

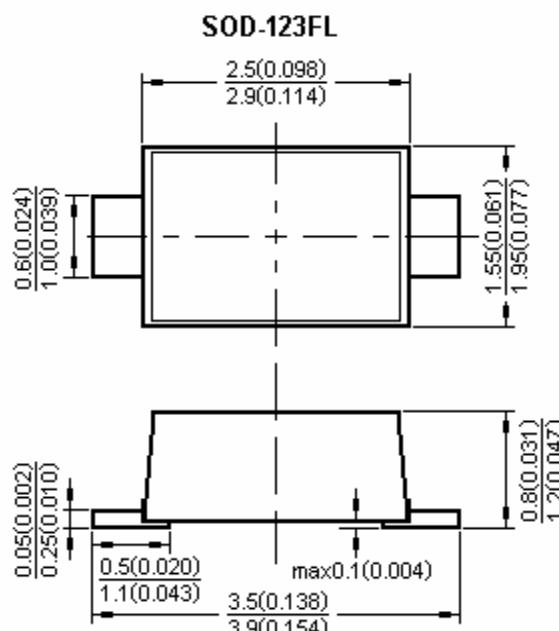
### Mechanical Data

- **Case:** JEDEC SOD-123FL molded plastic body over 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

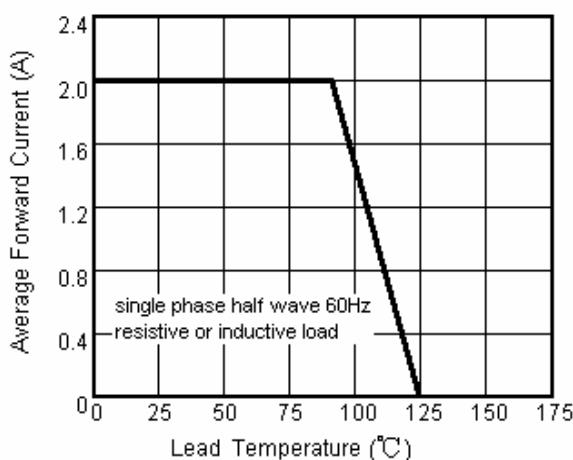
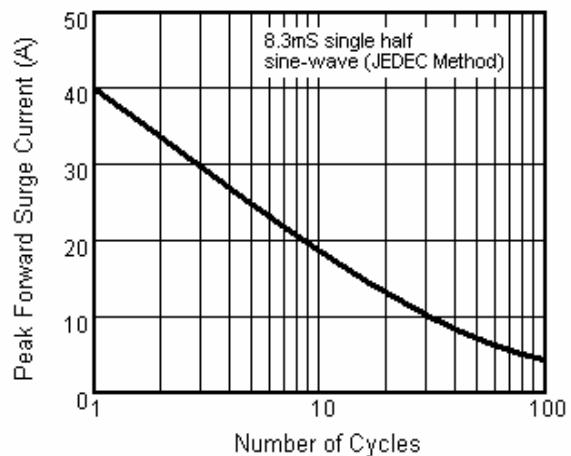
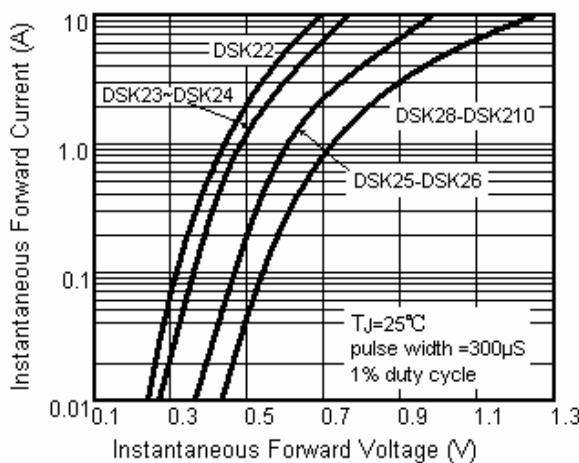
( $T_A = 25^\circ\text{C}$  unless otherwise noted)

|   | Symbol          | DSK22 | DSK23 | DSK24 | DSK25 | DSK26        | DSK28 | DSK210 | UNIT |
|---|-----------------|-------|-------|-------|-------|--------------|-------|--------|------|
| Maximum repetitive peak reverse voltage   | $V_{RRM}$       | 20    | 30    | 40    | 50    | 60           | 80    | 100    | V    |
| Maximum RMS voltage   | $V_{RMS}$       | 14    | 21    | 28    | 35    | 42           | 56    | 70     | V    |
| Maximum DC blocking voltage   | $V_{DC}$        | 20    | 30    | 40    | 50    | 60           | 80    | 100    | V    |
| Maximum average forward rectified current   | $I_{F(AV)}$     |       |       |       |       |              | 2     |        | A    |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load                            | $I_{FSM}$       |       |       |       |       |              | 40    |        | A    |
| Maximum instantaneous forward voltage at 2.0A   | $V_F$           | 0.50  | 0.55  | 0.70  | 0.85  |              |       |        | V    |
| Maximum DC reverse current $T_A = 25^\circ\text{C}$<br>at Rated DC blocking voltage $T_A = 100^\circ\text{C}$ | $I_R$           |       |       |       |       | 1.0          |       |        | mA   |
| Typical thermal resistance  | $R_{\theta JL}$ |       |       |       |       | 28           |       |        | °C/W |
| Operating junction and storage temperature range  | $T_J, T_{STG}$  |       |       |       |       | – 65 to +125 |       |        | °C   |



Dimensions in millimeters and (inches)

**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**
