



DSR0.3A-DSR0.3M

Surface Mount Standard Rectifiers

Major Ratings and Characteristics

| | |
|--------------------|----------------|
| $I_{F(AV)}$ | 0.3 A |
| V_{RRM} | 50 V to 1000 V |
| I_{FSM} | 15 A |
| I_R | 5 μ A |
| V_F | 1.1 V |
| $T_j \text{ max.}$ | 150 °C |

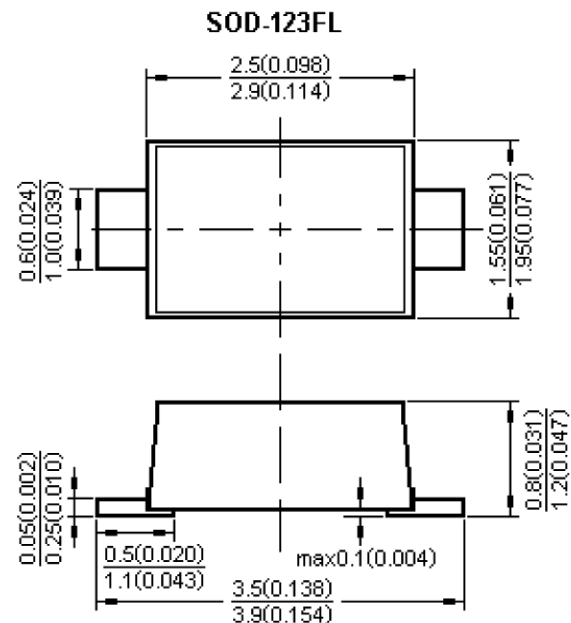


Features

- 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)

| | DSR-Symbol | 0.3A | 0.3B | 0.3D | 0.3G | 0.3J | 0.3K | 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} | 15 | | | | | | | A |
| Maximum instantaneous forward voltage at 0.3A | V_F | 1.1 | | | | | | | V |
| Maximum DC reverse current at Rated DC blocking voltage | I_R | 5.0 50 | | | | | | | μ A |
| Thermal resistance from junction to ambient (Note1) | $R_{\theta JA}$ | 220 | | | | | | | °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 ($\approx 35\text{ }\mu\text{m}$ thick)



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

Fig.1 Forward Current Derating Curve

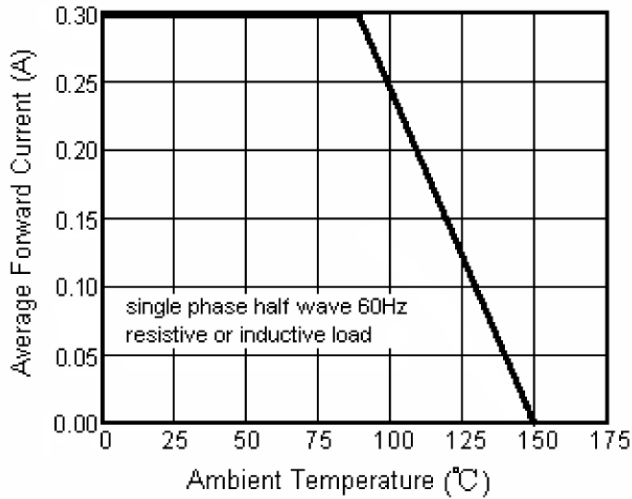


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

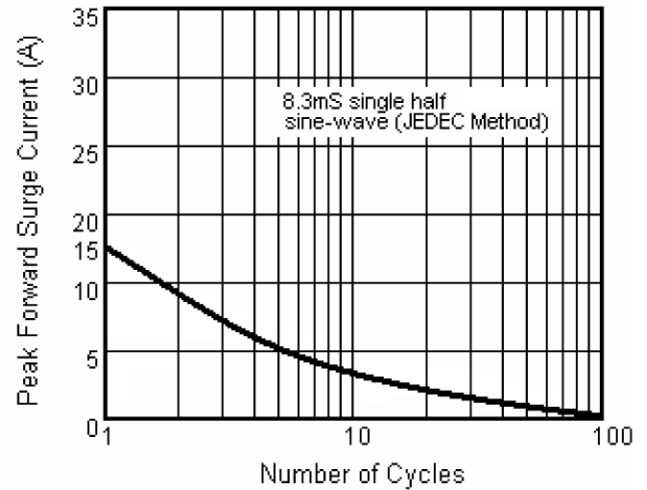


Fig.3 Typical Instantaneous Forward Characteristics

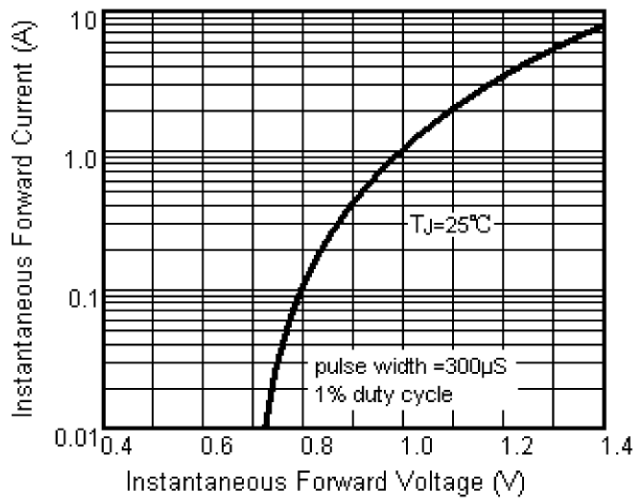


Fig.4 Typical Reverse Characteristics

