



FEATURES

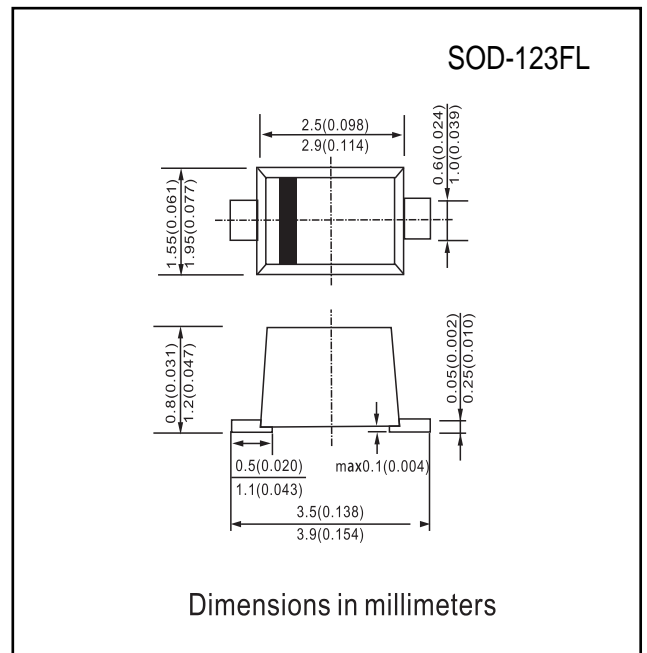
- For surface mounted applications
- Low profile package
- Ideal for automated placement
- Glass passivated
- High temperature soldering: 260 °C/ 10 s at terminals
- Wave and reflow solderable
- AEC-Q101 qualified
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC

Mechanical Data

Case: DO-219AB (SMF)

Polarity: band denotes cathode end

Weight: approx. 15 mg



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| | | RS07B | RS07D | RS07G | RS07J | RS07K | RS07M | UNITS | |
|--|------------|----------------|-------|-------|-------|-------|-------|-------|----|
| Device marking code | | RB | RD | RG | RJ | RK | RM | | |
| Maximum recurrent peak reverse voltage | V_{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS voltage | V_{RMS} | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| Maximum DC blocking voltage | V_{DC} | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum average forward rectified current $T_A=65$ (NOTE 1) | $I_{(AV)}$ | 0.7 | | | | | | A | |
| Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load $T_L=25$ | I_{FSM} | 20 | | | | | | A | |
| Typical thermal resistance (NOTE 2) | R_{j0A} | 180 | | | | | | K/W | |
| Maximum reverse recovery time (NOTE 3) | t_{rr} | 150 | | | 250 | | 500 | | ns |
| Operating temperature range | T_j | - 55 --- + 150 | | | | | | | |
| Storage temperature range | T_{STG} | - 55 --- + 150 | | | | | | | |

NOTES:1. Averaged over any 20 ms period.

2. Thermal resistance junction to ambient, 6.0 mm² copper pads to each terminal.

3. Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.



RATINGS AND CHARACTERISTIC CURVES RS07B THRU RS07M

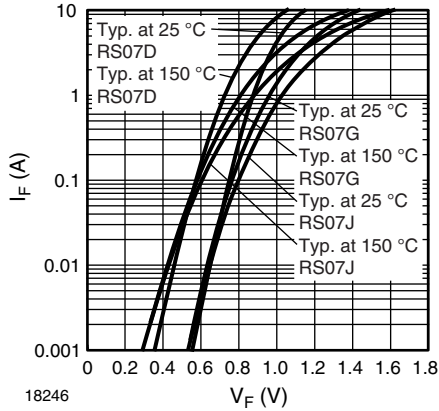


Figure 1. Typical Forward Characteristics

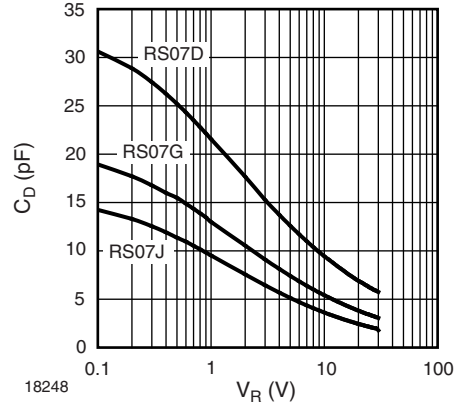


Figure 4. Typ. Diode Capacitance vs. Reverse Voltage

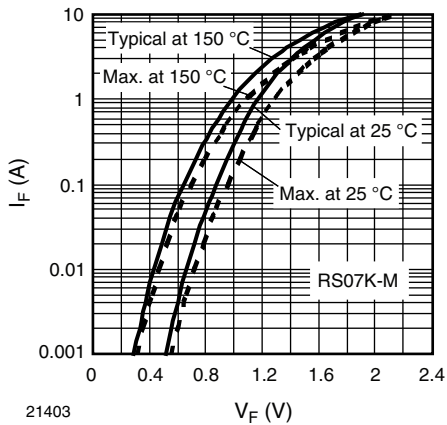


Figure 2. Typical Forward Characteristics

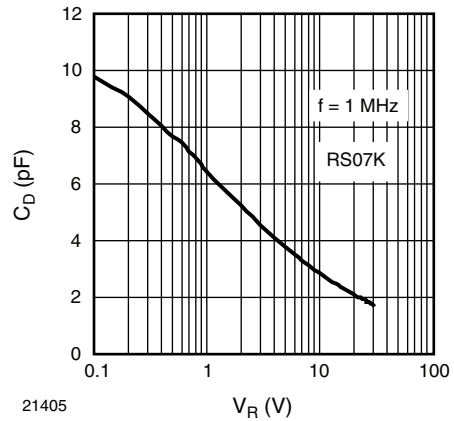


Figure 5. Typ. Diode Capacitance vs. Reverse Voltage

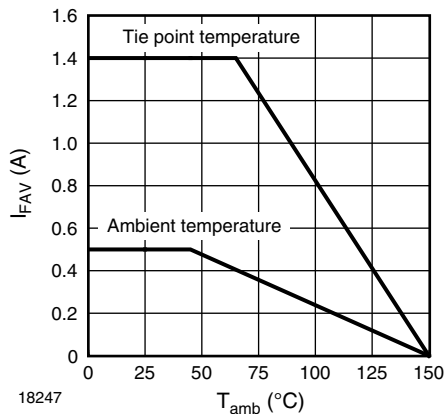


Figure 3. Forward Current Derating Curve

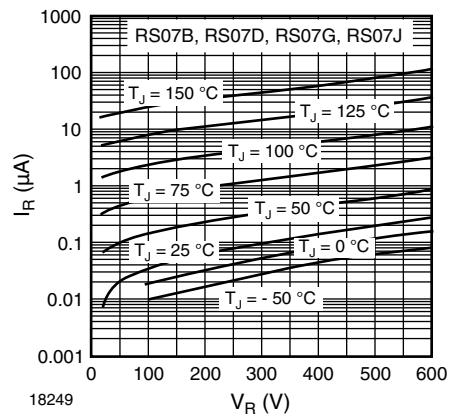


Figure 6. Typical Reverse Characteristics