

F1~F7

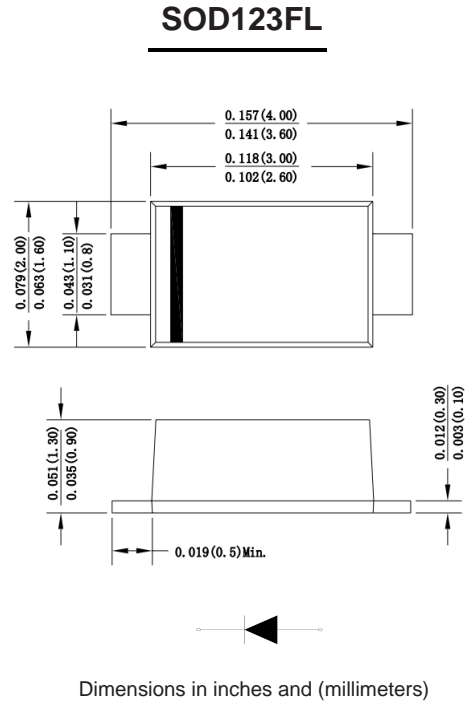
1.0Amp Fast Recovery Surface Mounted Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250°C/10 seconds at terminals

Mechanical Data

- Case :** Molded plastic body
- Terminals :** Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity :** Polarity symbol marking on body
- Mounting Position :** Any
- Weight :** 0.0007 ounce, 0.02 grams



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 current derate by 20%.

| Parameter | SYMBOLS | F1 | F2 | F3 | F4 | F5 | F6 | F7 | UNITS |
|---|----------------|-------------|-----|-----|-----|-----|-----|------|--------------------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 50 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 35 | 140 | 210 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V_{DC} | 50 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current at $T_L=100^\circ\text{C}$ | $I_{(AV)}$ | 1.0 | | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 35.0 | | | | | | | A |
| Maximum instantaneous forward voltage at 1.0A | V_F | 1.30 | | | | | | | V |
| Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$ | I_R | 5.0 500 | | | | | | | μA |
| Maximum reverse recovery time(Note 1) | T_{rr} | 150 | | | 250 | | 500 | | ns |
| Typical junction capacitance (Note2) | C_J | 9.0 | | | | | | | pF |
| Typical thermal resistance | R_{qJA} | 85.0 | | | | | | | $^\circ\text{C/W}$ |
| Operating junction and storage temperature range | T_J, T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

Note: 1.Reverse recovery time test condition: $I_F=0.5\text{A}$ $I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$
 2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

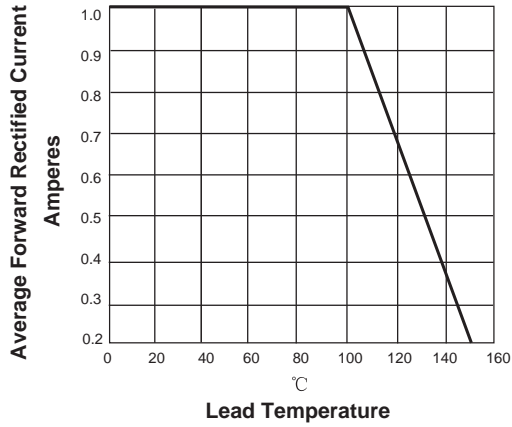


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

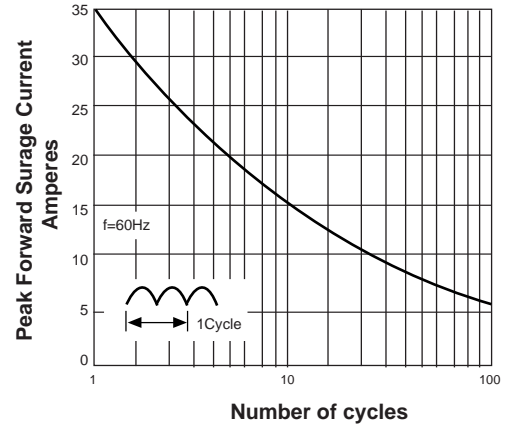


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

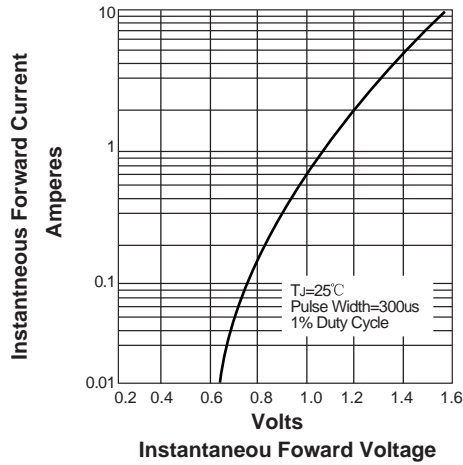


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

