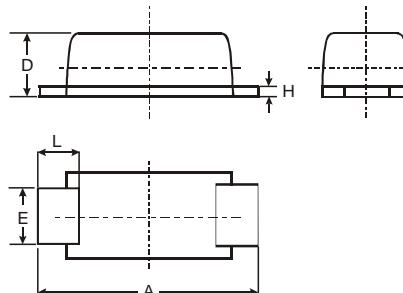
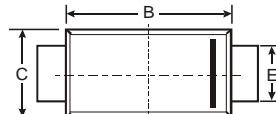
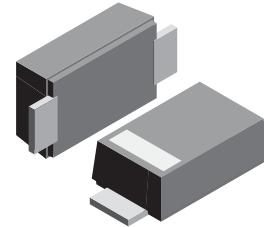


VOLTAGE RANGE: 20 - 100V

CURRENT: 1.0 A

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- High temperature soldering guaranteed:
250°C/10 seconds, 0.375(9.5mm) lead length,
5 lbs. (2.3kg) tension



| SOD-123FL | | | |
|-----------|-------|------|------|
| Dim | Min | Max | Typ |
| A | 3.58 | 3.72 | 3.65 |
| B | 2.72 | 2.78 | 2.75 |
| C | 1.77 | 1.83 | 1.80 |
| D | 1.02 | 1.08 | 1.05 |
| E | 0.097 | 1.03 | 1.00 |
| H | 0.13 | 0.17 | 0.15 |
| L | 0.53 | 0.57 | 0.55 |

All Dimensions in mm



Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic | Symbol | SS1020FL | SS1030FL | SS1040FL | SS1060FL | SS1080FL | SS10100FL | Unit |
|---|------------|----------------|----------|----------|----------|----------|-----------|------|
| | | Marking | S2 | S3 | S4 | S6 | S8 | |
| Maximum recurrent peak reverse voltage | V_{RRM} | 20 | 30 | 40 | 60 | 80 | 100 | V |
| Maximum RMS voltage | V_{RMS} | 14 | 21 | 28 | 42 | 56 | 70 | V |
| Maximum DC blocking voltage | V_{DC} | 20 | 30 | 40 | 60 | 80 | 100 | V |
| Maximum average forward rectified current $T_J=90$ | $I_{(AV)}$ | 1.0 | | | | | | A |
| Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load | I_{FSM} | 20 | | | | | | A |
| Maximum instantaneous @ $I_{FM}=1.0A$ forward voltage | V_F | 0.50 | 0.55 | 0.72 | 0.85 | | | V |
| Repetitive peak reverse current at rated DC blocking voltage | I_R | 0.3 | | | | | | mA |
| Typical junction capacitance | C_J | 30 | | | | | | pF |
| Operating temperature range | T_j | - 55 --- + 125 | | | | | | |
| Storage temperature range | T_{STG} | - 55 --- + 150 | | | | | | |

NOTE1.Measured at $f=1.0\text{MHz}, V_R=4.0\text{V}$



Sunmate

RATINGS AND CHARACTERISTIC CURVES SS1020FL THRU SS10100FL

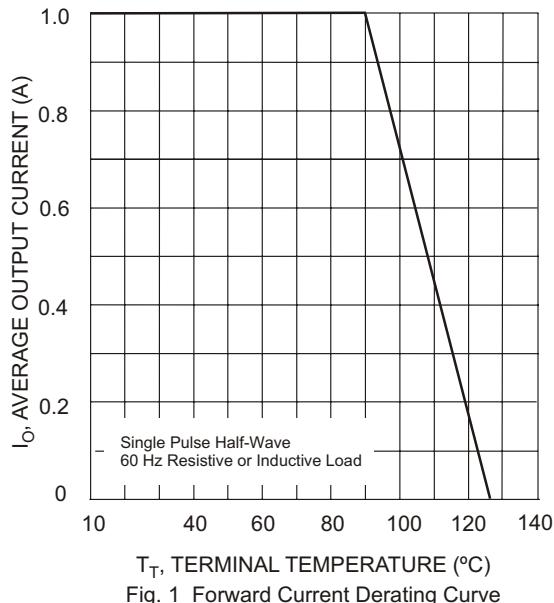


Fig. 1 Forward Current Derating Curve

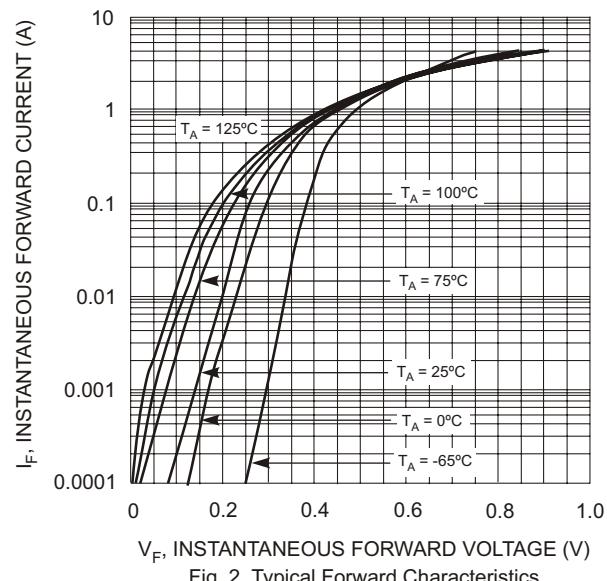


Fig. 2 Typical Forward Characteristics

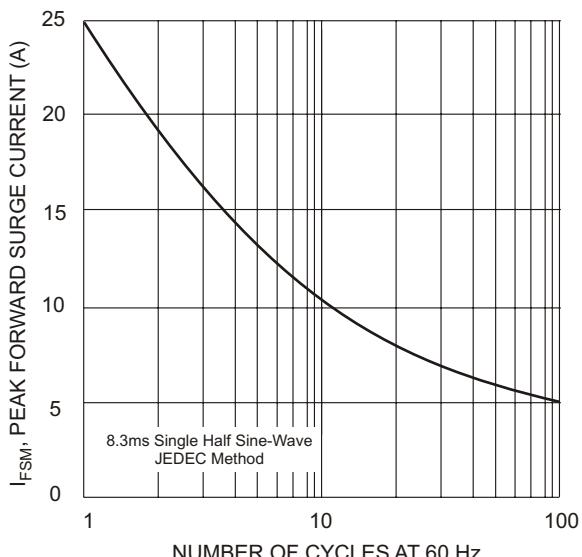


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

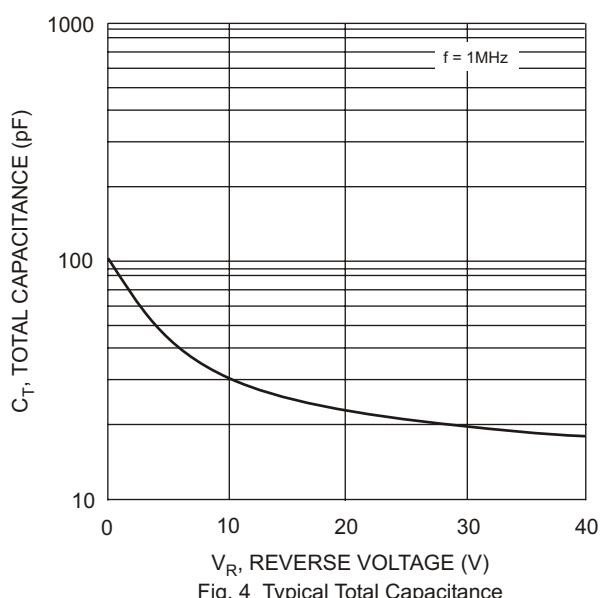


Fig. 4 Typical Total Capacitance