

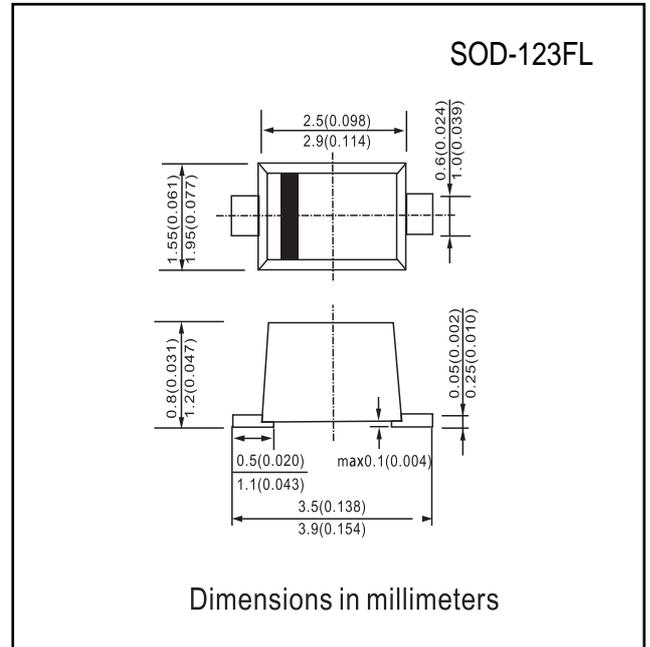


FEATURES

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Classification 94V-O

Mechanical Data

- Case: SOD-123FL, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.017 grams (approx.)
- Marking: SS1020FL G2 SS1030FL G3
SS1040FL G4 SS1060FL G6
SS10100FL G10



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Maximum Ratings @T_A=25°C unless otherwise specified

| Characteristic | Symbol | SS1020FL | SS1030FL | SS1040FL | SS1060FL | SS10100FL | Unit |
|---|-----------------------------------|-------------|----------|----------|----------|-----------|------|
| Peak Repetitive Reverse Voltage | V _{RRM} | 20 | 30 | 40 | 60 | 100 | V |
| Working Peak Reverse Voltage | V _{RFM} | | | | | | |
| DC Blocking Voltage | V _R | | | | | | |
| Forward Continuous Current (Note 1) | I _F | 1.0 | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 25 | | | | | A |
| Power Dissipation (Note 1) | P _d | 450 | | | | | mW |
| Operating and Storage Temperature Range | T _j , T _{STG} | -65 to +125 | | | | | °C |

Electrical Characteristics @T_A=25°C unless otherwise specified

| Characteristic | Symbol | SS1020FL | SS1030FL | SS1040FL | SS1060FL | SS10100FL | Unit |
|---|-----------------|----------|----------|----------|----------|-----------|------|
| Forward Voltage Drop @I _F = 1.0A | V _{FM} | 0.45 | 0.55 | 0.55 | 0.70 | 0.85 | V |
| Peak Reverse Leakage Current @ V _{RRM} | I _{RM} | 500 | | | | | μA |
| Typical Junction Capacitance | C _j | 50 | | | | | pF |

Note: 1. Valid provided that terminals are kept at ambient temperature.



RATINGS AND CHARACTERISTIC CURVES SS1020FL THRU SS10100FL

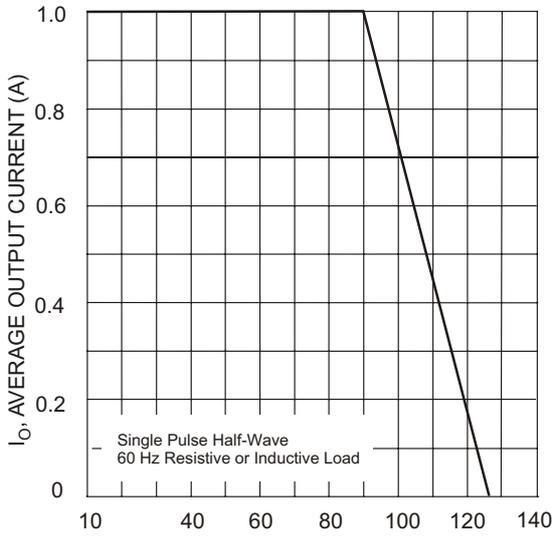


Fig. 1 Forward Current Derating Curve

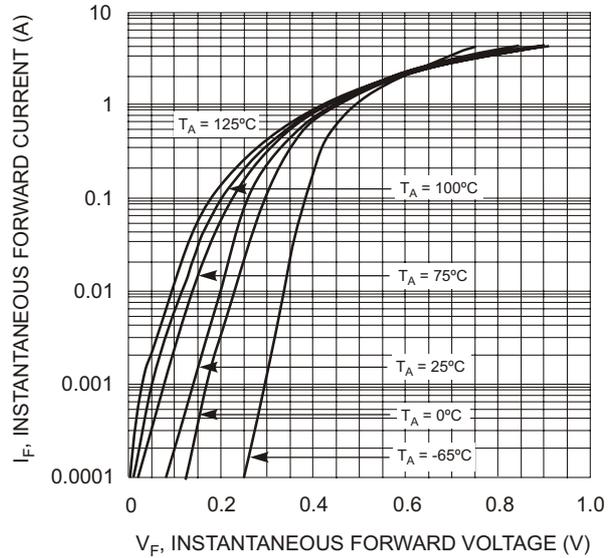


Fig. 2 Typical Forward Characteristics

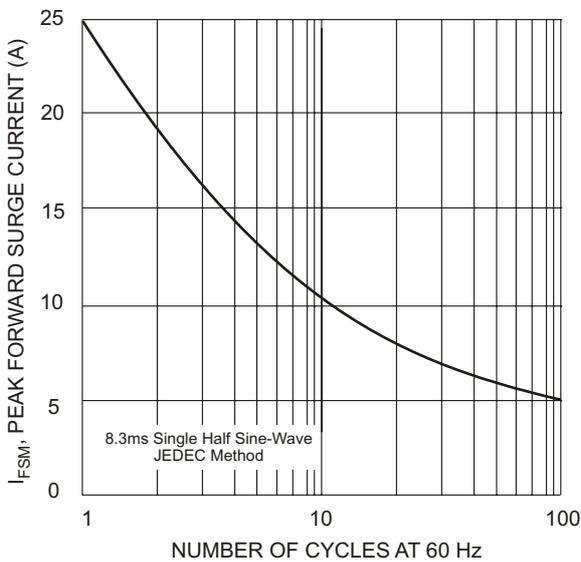


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

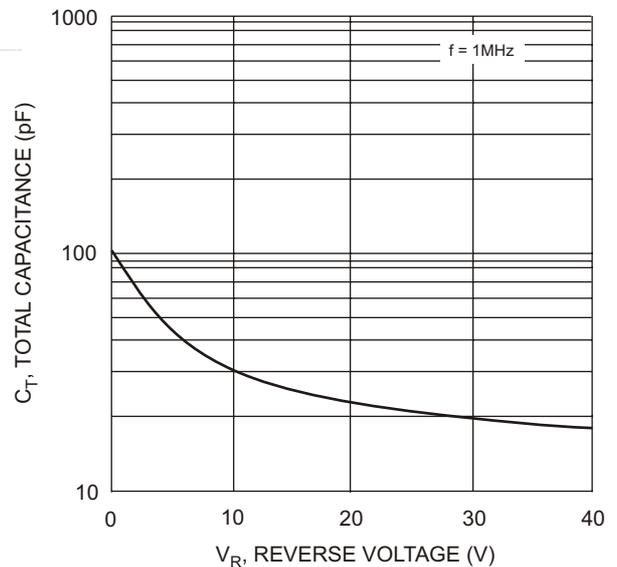


Fig. 4 Typical Total Capacitance