

SS1020FL~SS10200FL

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 200 Volt

CURRENT 1 Ampere

SOD-123FL

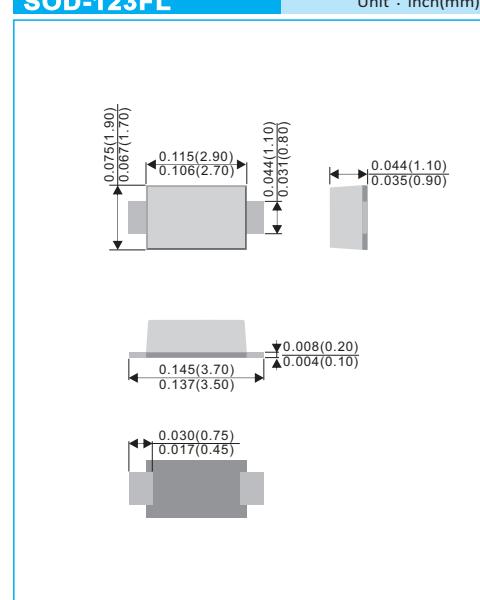
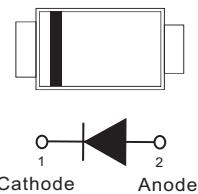
Unit : inch(mm)

FEATURES

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- Low power loss, high efficiency
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: SOD-123FL, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apporx. Weight: 0.0006 ounces, 0.0173 grams
- Polarity: Color band denotes cathode end



ABSOLUTE RATINGS (T_A=25°C unless otherwise noted)

| PARAMETER | SYMBOL | SS1020FL | SS1030FL | SS1040FL | SS1060FL | SS10100FL | SS10150FL | SS10200FL | UNITS |
|--|---------------------|----------|----------|----------|----------|-----------|-----------|-----------|-------|
| Marking Code | - | G2 | G3 | G4 | G6 | G10 | G15 | G20 | - |
| Reverse Voltage | V _R | 20 | 30 | 40 | 60 | 100 | 150 | 200 | V |
| Peak Reverse Voltage | V _{RRM} | 20 | 30 | 40 | 60 | 100 | 150 | 200 | V |
| Average Rectified Current | I _{F(AV)} | | | | 1 | | | | A |
| Forward Current RMS, D=0.5 | I _{F(RMS)} | | | | 2 | | | | A |
| Non-repetitive Peak Forward Surge Current at t=8.3ms | I _{FSM} | | | | 40 | | | 30 | A |

ELECTRICAL AND THERMAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

| PARAMETER | SYMBOL | SS1020FL | SS1030FL | SS1040FL | SS1060FL | SS10100FL | SS10150FL | SS10200FL | UNITS |
|--|--------------------------------------|----------|----------|----------|-------------|-----------|-----------|-----------|-------|
| Minimum Reverse Breakdown Voltage at I _R =500μA | V _R | 20 | 30 | 40 | 60 | 100 | 150 | 200 | V |
| Maximum Forward Voltage at I _F =1A | V _F | | 0.55 | | 0.7 | 0.8 | | 0.85 | V |
| Reverse Leakage Current at V _{RRM} | I _R | | | | 30 | | | | μA |
| Typical Thermal Resistance (Note 1) (Note 2) | R _{θJC} R _{θJA} | | | | 32 200 | | | | °C/W |
| Typical Junction Capacitance Rating at V _R =0V | C _J | | 155 | | 125 | 100 | | 85 | pF |
| Operating Junction Temperature and Storage Temperature Range | T _J , T _{STG} | | | | -55 to +150 | | | | °C |

Note:1.Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area

2.Mounted on a FR4 PCB, single-sided copper, mini pad.

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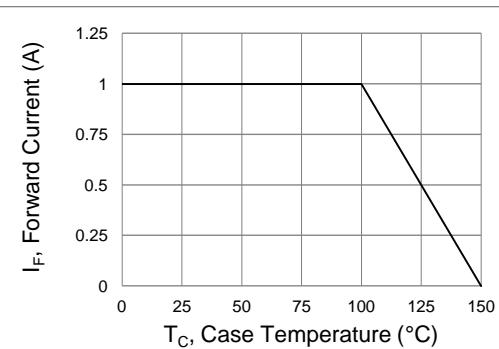


Fig.1 Forward Current Derating Curve

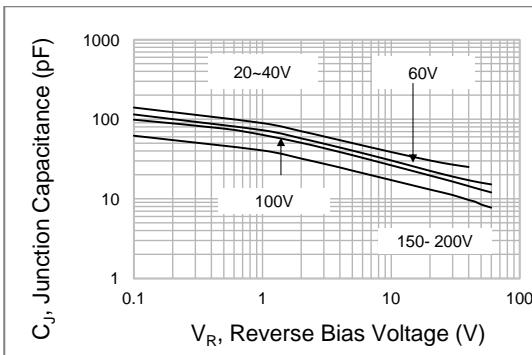


Fig.2 Typical Junction Capacitance

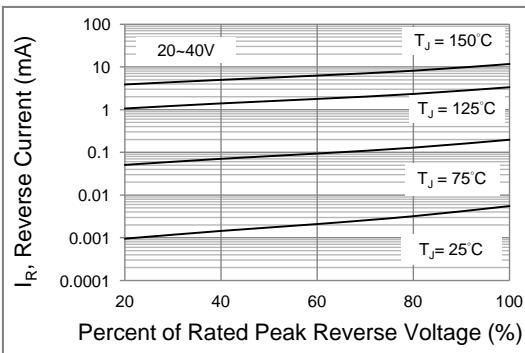


Fig.3 Typical Reverse Characteristics

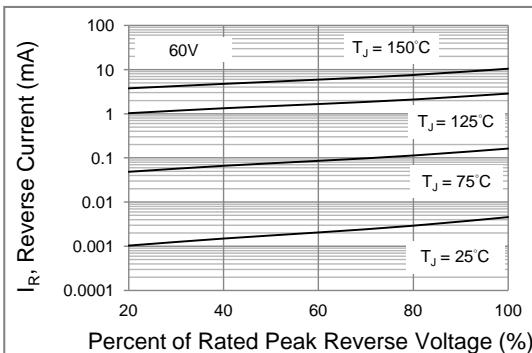


Fig.4 Typical Reverse Characteristics

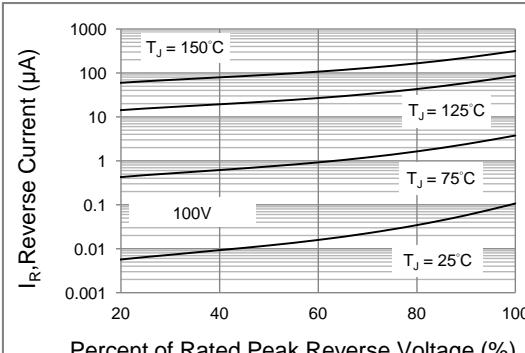


Fig.5 Typical Reverse Characteristics

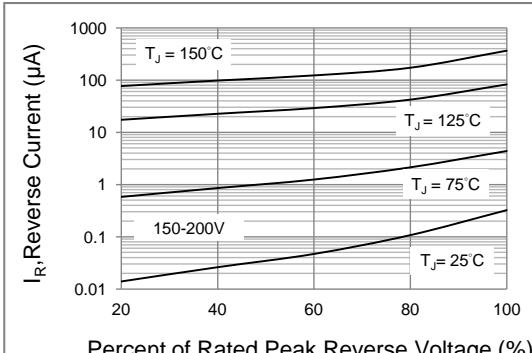


Fig.6 Typical Reverse Characteristics

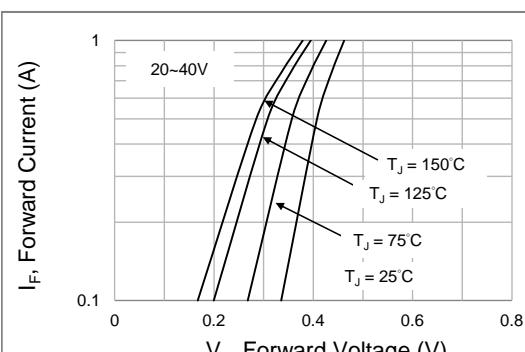


Fig.7 Typical Forward Characteristics

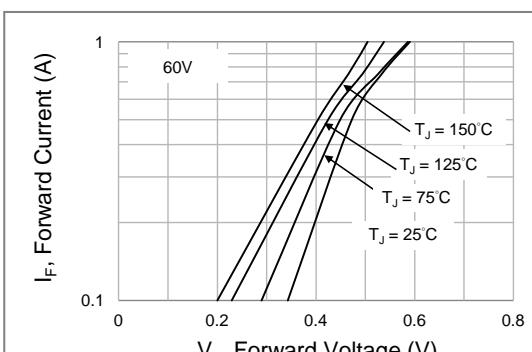


Fig.8 Typical Forward Characteristics

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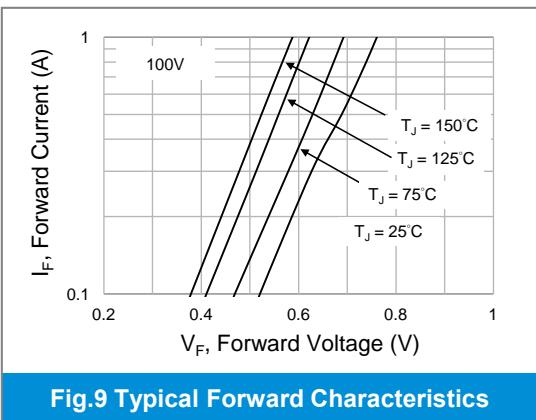


Fig.9 Typical Forward Characteristics

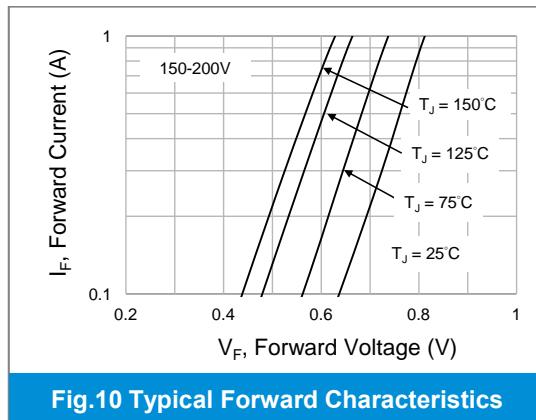


Fig.10 Typical Forward Characteristics

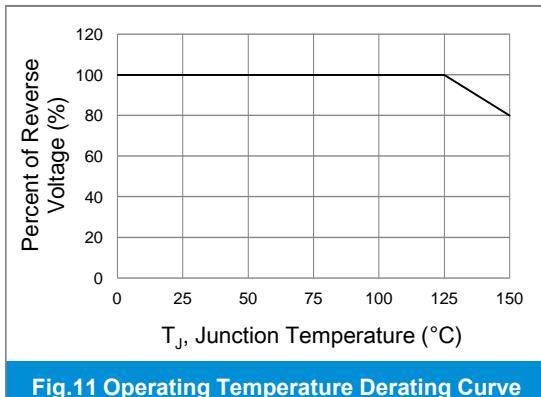
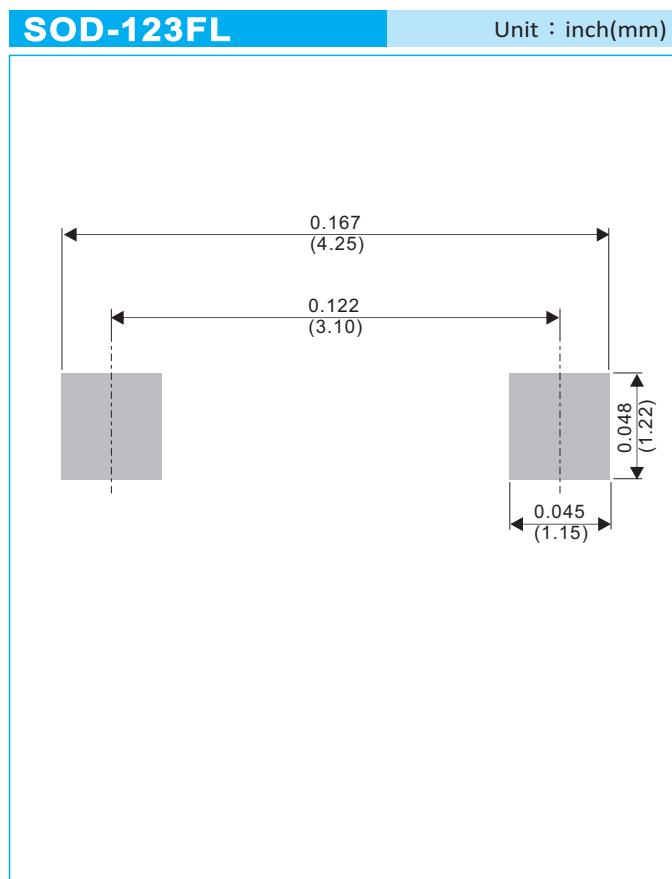


Fig.11 Operating Temperature Derating Curve

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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

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