



SS10150FL-AU

Surface Mount Schottky Barrier Rectifier

Voltage 150 V **Current** 1 A

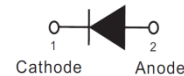
Features

- Low power loss, high efficiency
- High surge current capability
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : SOD-123FL Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0173 grams

SOD-123FL



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

| PARAMETER | SYMBOL | LIMIT | UNITS |
|--|------------------------------|---------|-------|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 150 | V |
| Maximum RMS Voltage | V _{RMS} | 105 | V |
| Maximum DC Blocking Voltage | V _{DC} | 150 | V |
| Maximum Average Forward Current | I _{F(AV)} | 1 | A |
| Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load | I _{FSM} | 30 | A |
| Typical Junction Capacitance Measured at 1 MHZ And Applied V _R = 4 V | C _J | 40 | pF |
| Typical Thermal Resistance | (Note 1) R _{θJA} | 200 | °C/W |
| | (Note 2) R _{θJC} | 32 | |
| | (Note 2) R _{θJL} | 32 | |
| Operating Junction Temperature Range | T _J | -55~150 | °C |
| Storage Temperature Range | T _{STG} | -55~150 | °C |



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Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

| PARAMETER | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNITS |
|-------------------------------------|--------|---|------|------|------|-------|
| Forward Voltage | V_F | $I_F = 0.5\text{ A}, T_J = 25^\circ\text{C}$ | - | 0.75 | - | V |
| | | $I_F = 1\text{ A}, T_J = 25^\circ\text{C}$ | - | - | 0.85 | V |
| | | $I_F = 0.5\text{ A}, T_J = 125^\circ\text{C}$ | - | 0.6 | - | V |
| | | $I_F = 1\text{ A}, T_J = 125^\circ\text{C}$ | - | 0.67 | - | V |
| Reverse Current ^(Note 3) | I_R | $V_R = 120\text{ V}, T_J = 25^\circ\text{C}$ | - | 0.15 | - | uA |
| | | $V_R = 150\text{ V}, T_J = 25^\circ\text{C}$ | - | - | 30 | |
| | | $V_R = 150\text{ V}, T_J = 125^\circ\text{C}$ | - | 110 | - | |

NOTES :

1. Mounted on a FR4 PCB, single-sided copper, standard footprint.
2. Mounted on a FR4 PCB, single-sided copper, with 100 cm² copper pad area.
3. Short duration pulse test used to minimize self-heating effect.



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TYPICAL CHARACTERISTIC CURVES

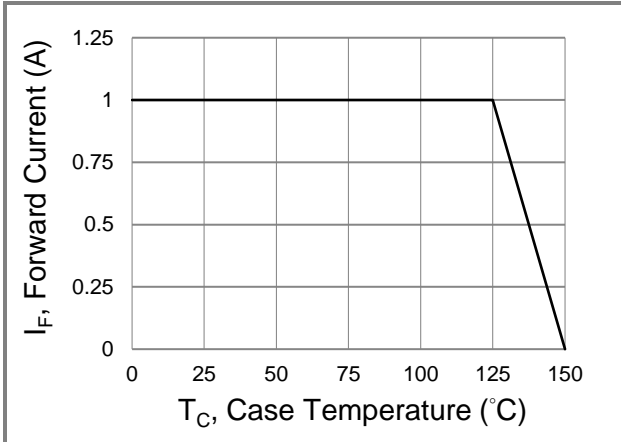


Fig.1 Forward Current Derating Curve

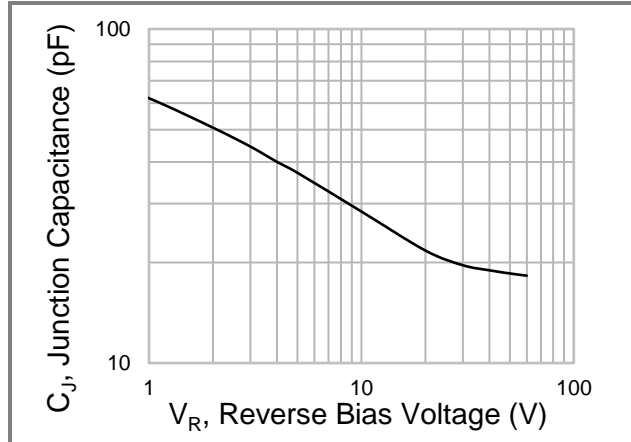


Fig.2 Typical Junction Capacitance

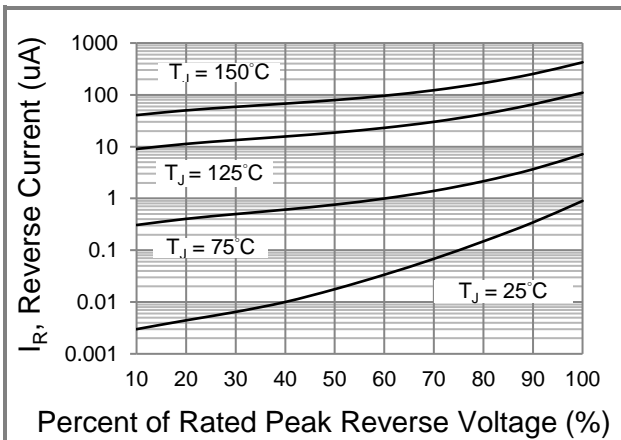


Fig.3 Typical Reverse Characteristics

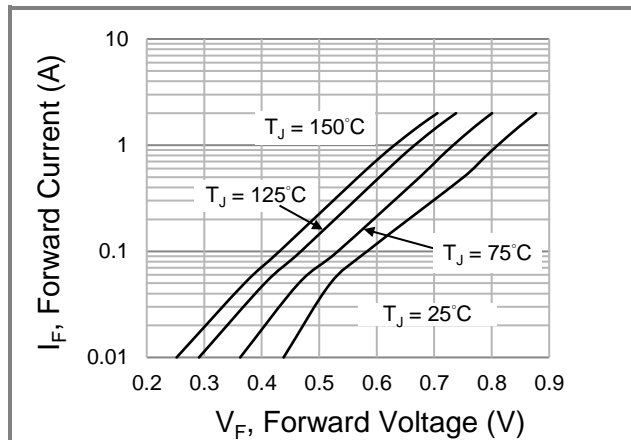


Fig.4 Typical Forward Characteristics

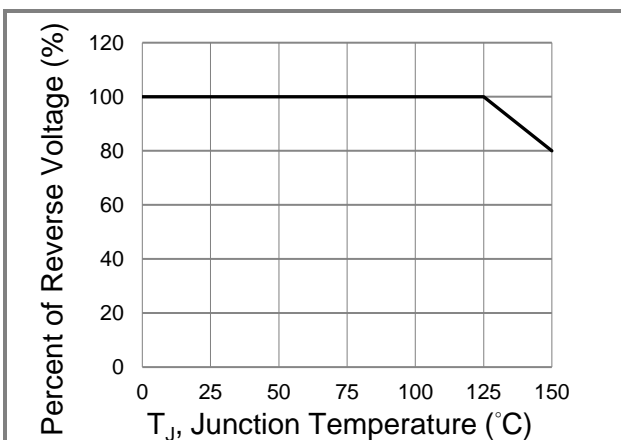


Fig.5 Operating Temperature Derating Curve



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Part No. Packing Code Version

| Part No. | Package Type | Packing Type | Marking | Version |
|--------------|--------------|------------------|---------|--------------------------------|
| SS10150FL-AU | SOD-123FL | 3K pcs / 7" Reel | G15 | Halogen free RoHS compliant |

Packaging Information & Mounting Pad Layout

