

STR10100LSS

Low V_F Schottky Barrier Rectifier

Voltage

100 V

Current

10 A

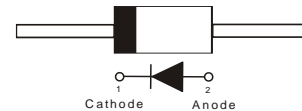
Features

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

Mechanical Data

- Case : DO-201AD Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 1.122 grams

DO-201AD



Maximum Ratings and Thermal Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

| PARAMETER | | SYMBOL | LIMIT | UNITS |
|--|----------|-----------------|---------|--------------------|
| Maximum Repetitive Peak Reverse Voltage | | V_{RRM} | 100 | V |
| Maximum RMS Voltage | | V_{RMS} | 70 | V |
| Maximum DC Blocking Voltage | | V_{DC} | 100 | V |
| Maximum Average Forward Current | | $I_{F(AV)}$ | 10 | A |
| Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load | | I_{FSM} | 140 | A |
| Typical Junction Capacitance Measured at 1 MHZ And Applied $V_R = 4\text{ V}$ | | C_J | 600 | pF |
| Typical Thermal Resistance | (Note 1) | $R_{\theta JC}$ | 16 | $^\circ\text{C/W}$ |
| | (Note 1) | $R_{\theta JL}$ | 11 | |
| Operating Junction Temperature Range | | T_J | -55~150 | $^\circ\text{C}$ |
| Storage Temperature Range | | T_{STG} | -55~150 | $^\circ\text{C}$ |



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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 | $I_F = 3\text{ A}, T_J = 25^\circ\text{C}$ | - | 0.48 | - | V |
| | | $I_F = 5\text{ A}, T_J = 25^\circ\text{C}$ | - | 0.54 | - | |
| | | $I_F = 10\text{ A}, T_J = 25^\circ\text{C}$ | - | - | 0.72 | |
| | | $I_F = 3\text{ A}, T_J = 125^\circ\text{C}$ | - | 0.41 | - | |
| | | $I_F = 5\text{ A}, T_J = 125^\circ\text{C}$ | - | 0.49 | - | |
| | | $I_F = 10\text{ A}, T_J = 125^\circ\text{C}$ | - | 0.6 | - | |
| Reverse Current ^(Note 2) | I_R | $V_R = 80\text{ V}, T_J = 25^\circ\text{C}$ | - | 3 | - | μA |
| | | $V_R = 100\text{ V}, T_J = 25^\circ\text{C}$ | - | - | 50 | |
| | | $V_R = 100\text{ V}, T_J = 125^\circ\text{C}$ | - | 5.3 | - | mA |

NOTES :

1. Mounted on a FR-4 PCB, single-sided copper, with 100cm² copper pad area.
2. Short duration pulse test used to minimize self-heating effect.



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TYPICAL CHARACTERISTIC CURVES

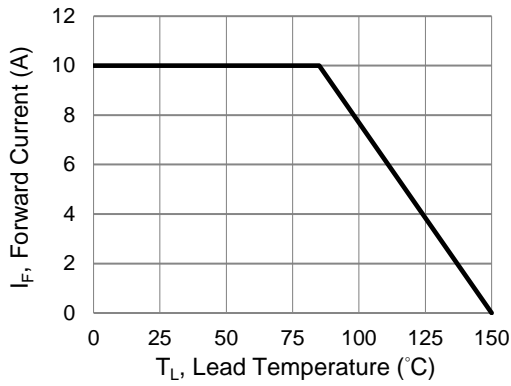


Fig.1 Forward Current Derating Curve

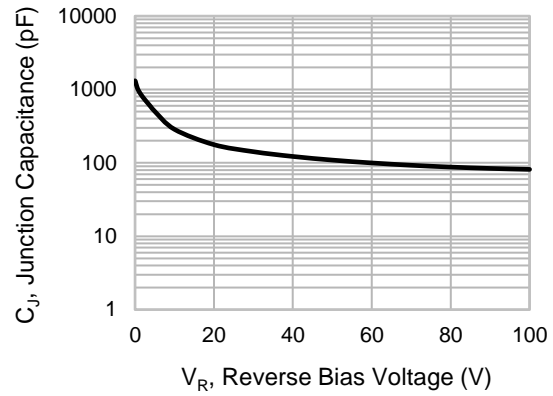


Fig.2 Typical Junction Capacitance

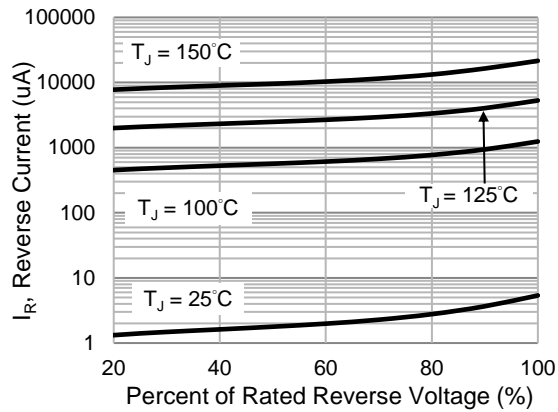


Fig.3 Typical Reverse Characteristics

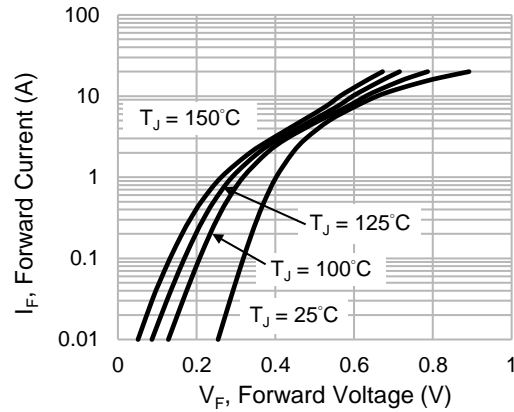


Fig.4 Typical Forward Characteristics

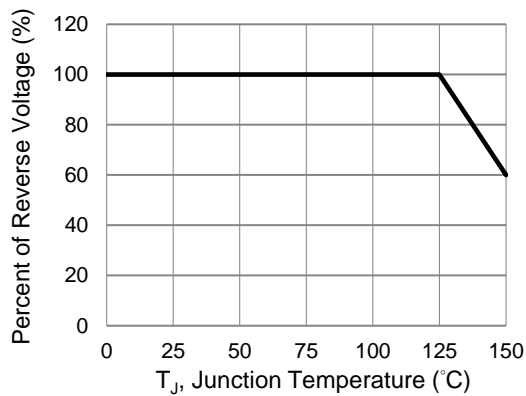


Fig.5 Operating Temperature Derating Curve

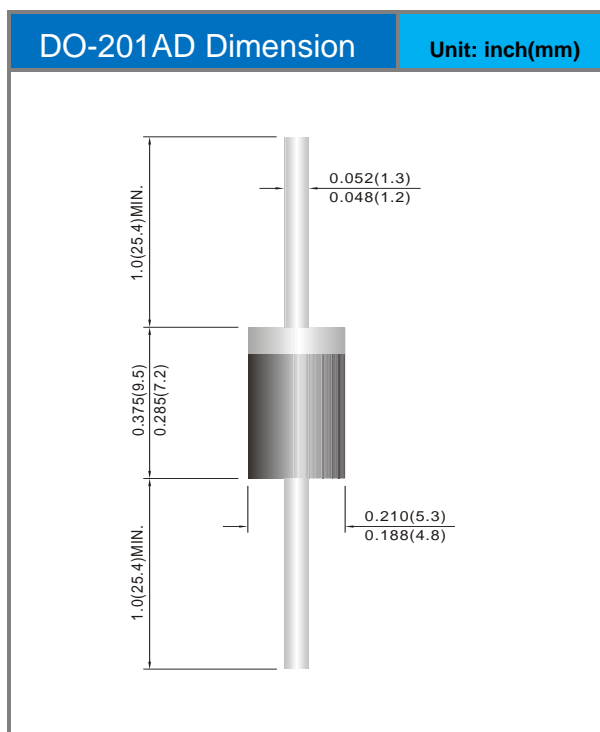


STR10100LSS

Part No. Packing Code Version

| Part No. Packing Code | Package Type | Packing Type | Marking | Version |
|-----------------------|--------------|----------------|-------------|--------------------------------|
| STR10100LSS_AY_00301 | DO-201AD | 1250pcs / Ammo | STR10100LSS | Halogen free RoHS compliant |

Packaging Information





STR10100LSS

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