

Schottky Barrier Rectifier

Reverse Voltage 60 Volts Forward Current 5.0 Amperes

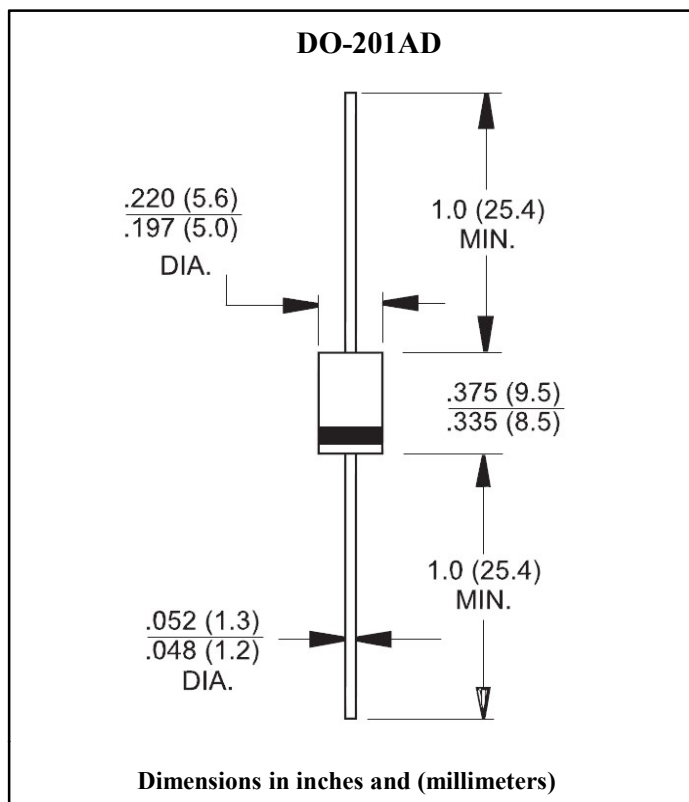
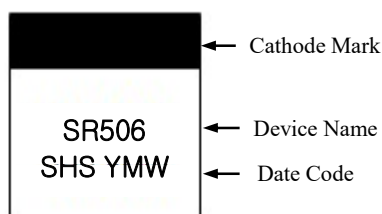
Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Mechanical Data

- Case : Molded plastic
- Epoxy : UL 94V-O rate flame retardant
- Lead : Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity : Color band denotes cathode end
- High temperature soldering guaranteed : 260°C/10 seconds
/0.375", (9.5mm) lead lengths at 5lbs., (2.3kg) tension
- Weight : 1.1grams

Marking



Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified
 Single phase half wave 60 Hz, resistive or inductive load
 For capacitive load, derate current by 20%

| Parameter | Symbol | Rated Value | Unit | Remark |
|---|---------------|-------------|--------------|-------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 60 | V | |
| Maximum RMS Voltage | V_{RMS} | 42 | V | |
| Maximum DC Blocking Voltage | V_{DC} | 60 | V | |
| Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length (Fig. 1) | $I_F(AV)$ | 5.0 | A | |
| Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load(JEDEC Method) | I_{FSM} | 150 | A | |
| Maximum Instantaneous Forward Voltage at 5.0A | V_F | 0.70 | V | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 0.5 | mA | $T_a=25^\circ C$ |
| | | 50 | mA | $T_a=100^\circ C$ |
| Typical Junction Capacitance | C_J | 380 | pF | Note 1 |
| Typical Thermal Resistance | $R_{th(j-a)}$ | 50 | $^\circ C/W$ | Note 2 |
| | $R_{th(j-l)}$ | 10 | $^\circ C/W$ | |
| Operation Junction Temperature Range | T_J | -55 to +150 | $^\circ C$ | |
| Storage Temperature Range | T_{STG} | -55 to +150 | $^\circ C$ | |

Note 1. Measured at 1MHz and Applied Reverse Voltage of 4.0Volts D.C.

Note 2. Thermal resistance from junction to ambient 0.375"(9.5mm) lead lengths, P.C.B mounted



Ratings and Characteristics Curves ($T_a=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

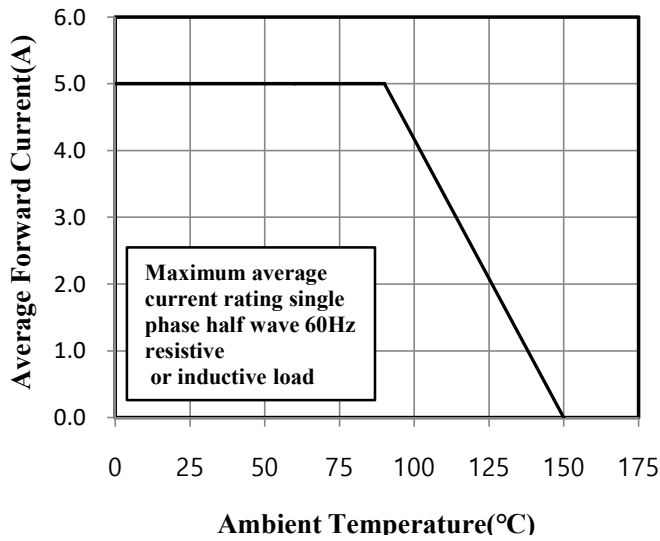


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

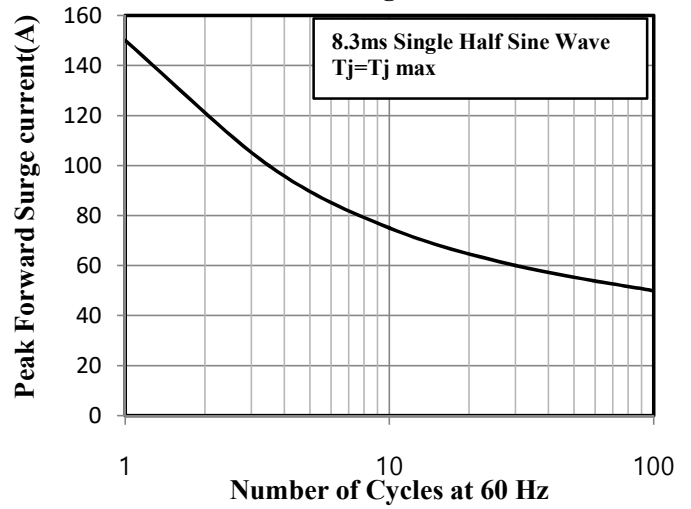


Fig.3 Typical Instantaneous Forward Characteristics

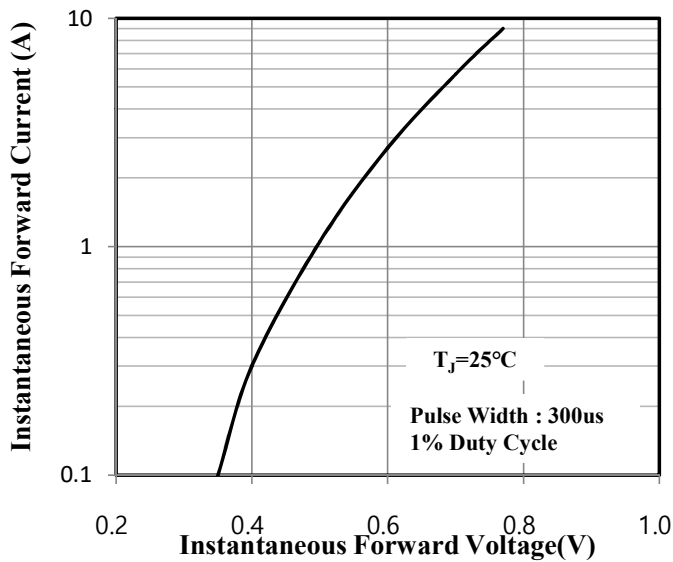


Fig.4 Typical Junction Capacitance

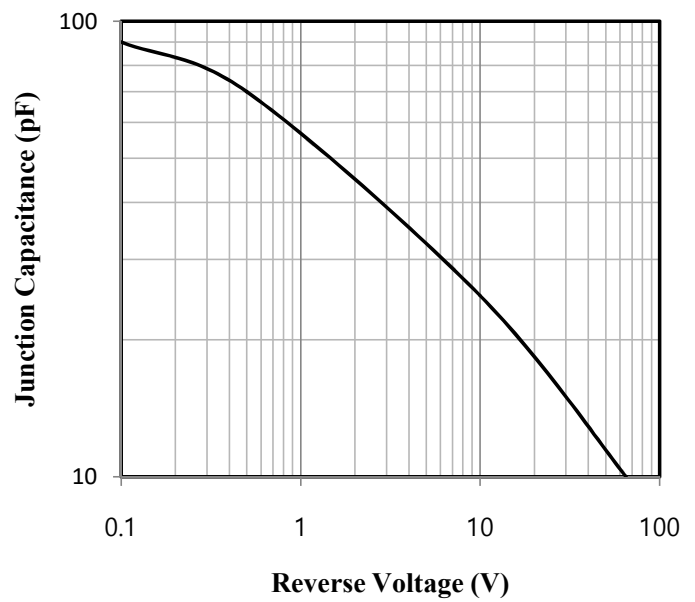


Fig.5 Typical Reverse Characteristics

