

**VOLTAGE RANGE: 50 - 60V**

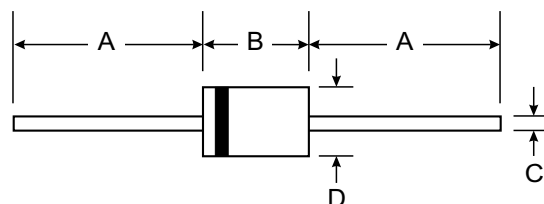
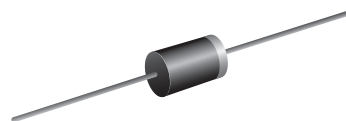
**CURRENT: 3.3 A**

### Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability

### Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



| DO-201AD             |       |      |
|----------------------|-------|------|
| Dim                  | Min   | Max  |
| A                    | 25.40 | —    |
| B                    | 7.20  | 9.50 |
| C                    | 1.20  | 1.30 |
| D                    | 4.80  | 5.30 |
| All Dimensions in mm |       |      |

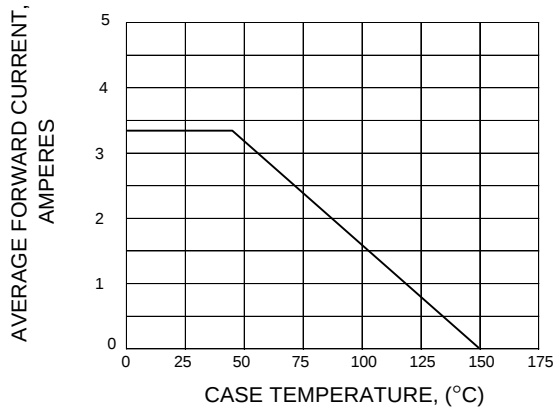
### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

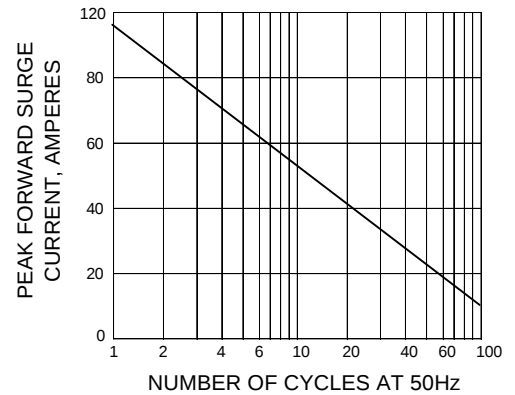
| Characteristic                                                                       | Symbol             | 31DQ05        | 31DQ06 | Unit |
|--------------------------------------------------------------------------------------|--------------------|---------------|--------|------|
| Maximum Recurrent Peak Reverse Voltage                                               | V <sub>RRM</sub>   | 50            | 60     | V    |
| Maximum DC Blocking Voltage                                                          | V <sub>DC</sub>    | 50            | 60     | V    |
| Maximum Average Forward Current<br>at Ambient Temperature, T <sub>c</sub> = 48 °C    | I <sub>F(AV)</sub> | 3.3           |        | A    |
| Maximum Non-repetitive Peak Forward Surge Current<br>( 50 Hz, Sine wave, 10ms )      | I <sub>FSM</sub>   | 340           |        | A    |
| Maximum Forward Voltage at I <sub>F</sub> = 3.0 A                                    | V <sub>F</sub>     | 0.62          |        | V    |
| Maximum Reverse Current at V <sub>R</sub> = V <sub>RRM</sub> , T <sub>j</sub> = 25°C | I <sub>R</sub>     | 3.0           |        | mA   |
| Junction Temperature Range                                                           | T <sub>J</sub>     | - 40 to + 150 |        | °C   |
| Storage Temperature Range                                                            | T <sub>STG</sub>   | - 40 to + 150 |        | °C   |

## RATING AND CHARACTERISTIC CURVES ( 31DQ05- 31DQ06 )

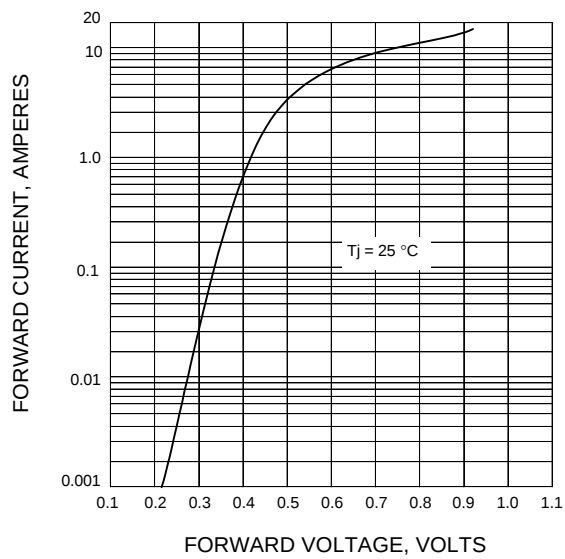
**FIG.1 - FORWARD CURRENT DERATING CURVE**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

