

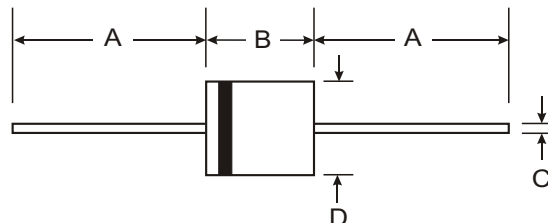
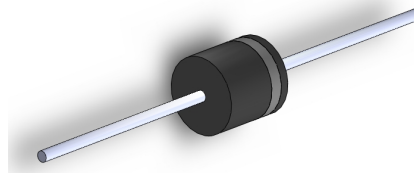
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 10.0 A**

### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

### Mechanical Data

- Case: R-6 Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Color Band Indicates Cathode
- Approx. Weight: 1.7 grams
- Mounting Position: Any



| R-6                  |      |     |
|----------------------|------|-----|
| Dim                  | Min  | Max |
| A                    | 25.4 | —   |
| B                    | 8.6  | 9.1 |
| C                    | 1.2  | 1.3 |
| D                    | 8.6  | 9.1 |
| 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             | 10A05       | 10A1 | 10A2 | 10A4 | 10A6 | 10A8 | 10A10 | Unit |
|-----------------------------------------------------------------------------------------------------------------------|--------------------|-------------|------|------|------|------|------|-------|------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                | VRRM<br>VRWM<br>VR | 50          | 100  | 200  | 400  | 600  | 800  | 1000  | V    |
| RMS Reverse Voltage                                                                                                   | VR(RMS)            | 35          | 70   | 140  | 280  | 420  | 560  | 700   | V    |
| Average Rectified Output Current<br>(Note 1)<br>@TA = 50°C                                                            | IO                 | 10          |      |      |      |      |      |       | A    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | IFSM               | 600         |      |      |      |      |      |       | A    |
| Forward Voltage<br>@IF = 10A                                                                                          | VFM                | 1.0         |      |      |      |      |      |       | V    |
| Peak Reverse Current<br>@TA = 25°C<br>At Rated DC Blocking Voltage @TA = 100°C                                        | IRM                | 10<br>100   |      |      |      |      |      |       | μA   |
| Typical Junction Capacitance (Note 2)                                                                                 | Cj                 | 150         |      |      |      | 80   |      |       | pF   |
| Typical Thermal Resistance Junction to Ambient<br>(Note 1)                                                            | RθJA               | 10          |      |      |      |      |      |       | °C/W |
| Operating Temperature Range                                                                                           | Tj                 | -50 to +150 |      |      |      |      |      |       | °C   |
| Storage Temperature Range                                                                                             | TSTG               | -50 to +150 |      |      |      |      |      |       | °C   |

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

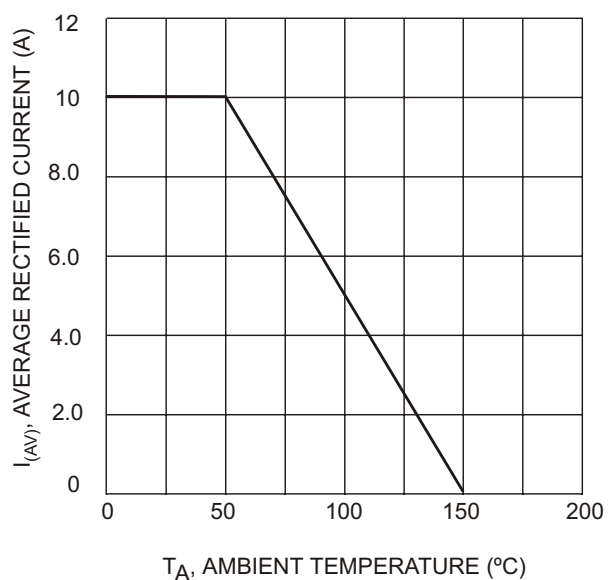


Fig. 1 Forward Current Derating Curve

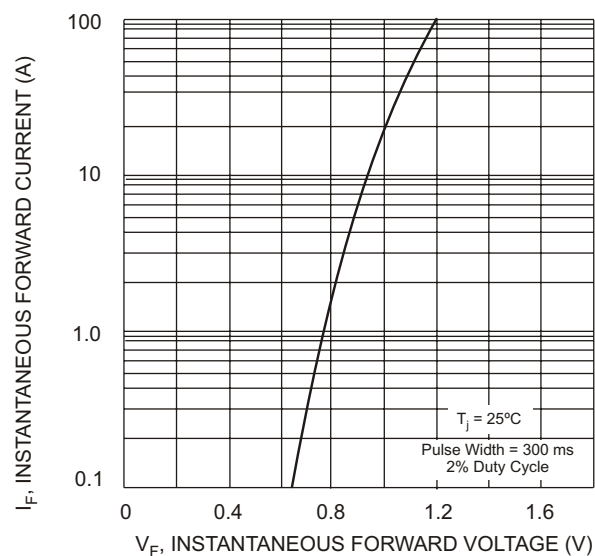


Fig. 2 Typical Forward Characteristics

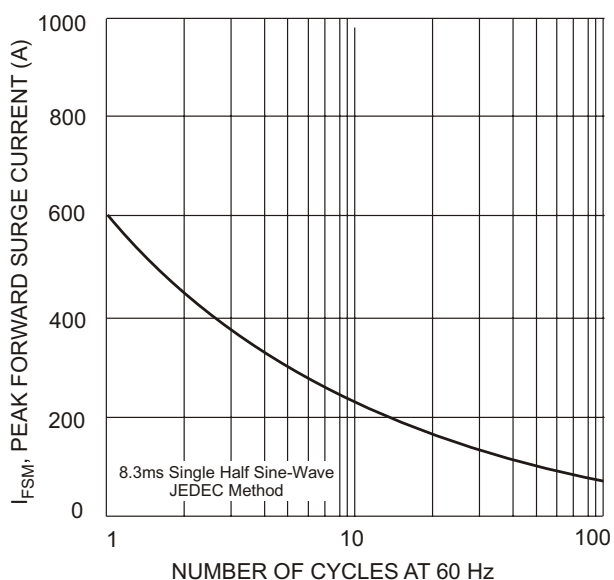


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

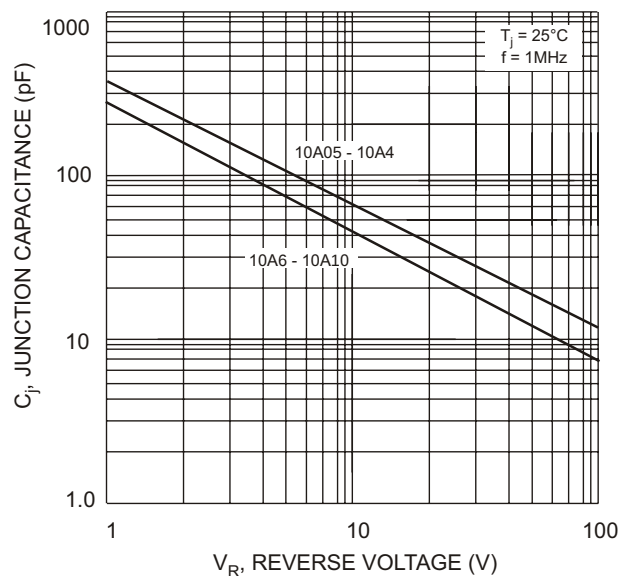


Fig. 4 Typical Junction Capacitance