

**VOLTAGE RANGE: 50 - 1000V**

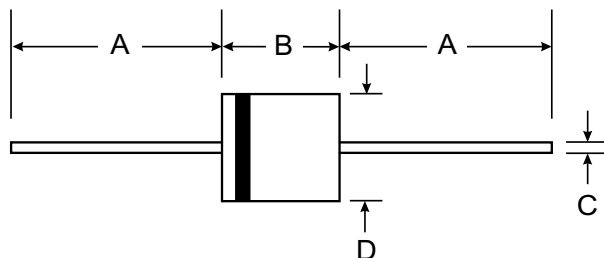
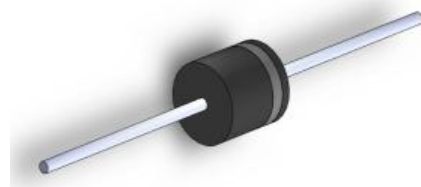
**CURRENT: 6.0 A**

### Features

- Diffused Junction
- High Current Capability and Low Forward Voltage Drop
- Low Reverse Leakage Current
- Plastic Material - UL Flammability Classification 94V-0

### Mechanical Data

- Case: R-6, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 2.1 grams (approx)
- Marking: Type Number



| R-6                  |      |     |
|----------------------|------|-----|
| Dim                  | Min  | Max |
| A                    | 25.4 | —   |
| B                    | 8.6  | 9.1 |
| C                    | 1.2  | 1.3 |
| 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                               | 6A05        | 6A1 | 6A2 | 6A4 | 6A6 | 6A8 | 6A10 | Unit |
|---------------------------------------------------------------------------------------------------------|--------------------------------------|-------------|-----|-----|-----|-----|-----|------|------|
| Maximum Recurrent Peak Reverse Voltage                                                                  | V <sub>RRM</sub>                     | 50          | 100 | 200 | 400 | 600 | 800 | 1000 | V    |
| Maximum RMS Voltage                                                                                     | V <sub>RMS</sub>                     | 35          | 70  | 140 | 280 | 420 | 560 | 700  | V    |
| Maximum DC Blocking Voltage                                                                             | V <sub>DC</sub>                      | 50          | 100 | 200 | 400 | 600 | 800 | 1000 | V    |
| Maximum Average Forward Rectified Current<br>9.5mm lead length @ T <sub>A</sub> = 75°C (See Fig. 1)     | I <sub>(AV)</sub>                    | 6.0         |     |     |     |     |     |      | A    |
| Peak Forward Surge Current 8.3 ms single half<br>sine-wave superimposed on rated load<br>(JEDEC method) | I <sub>FSM</sub>                     | 400         |     |     |     |     |     |      | A    |
| Maximum Instantaneous Forward Current at 6.0A DC                                                        | V <sub>F</sub>                       | 0.90        |     |     |     |     |     |      | V    |
| Maximum DC Reverse Current<br>at Rated Blocking Voltage                                                 | I <sub>R</sub>                       | 10<br>100   |     |     |     |     |     |      | μA   |
| Operating and Storage Temperature Range                                                                 | T <sub>J</sub> ,<br>T <sub>STG</sub> | -65 to +175 |     |     |     |     |     |      | °C   |

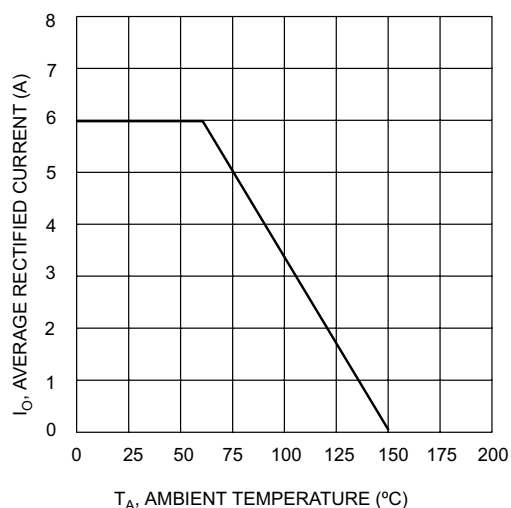


Fig. 1 Forward Current Derating Curve

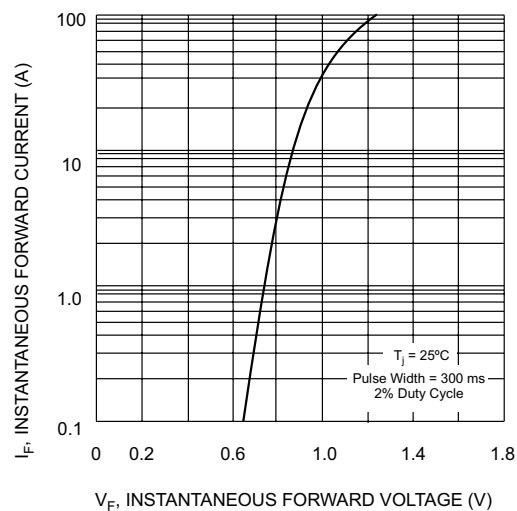


Fig. 2 Typical Forward Characteristics

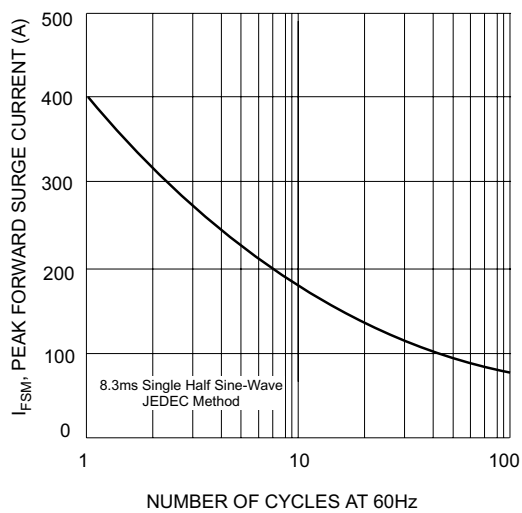


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

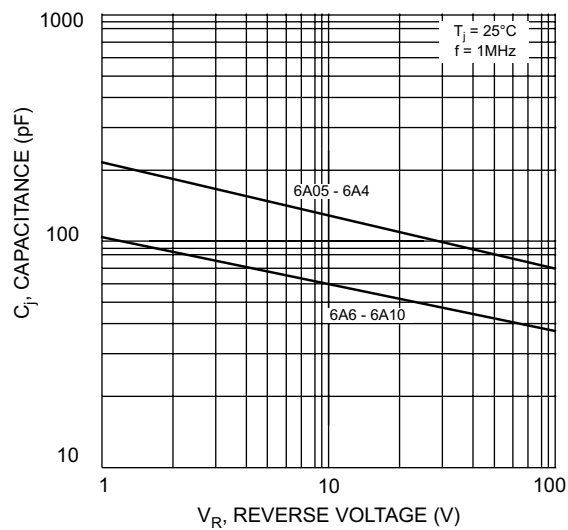


Fig. 4 Typical Junction Capacitance