

PR6001 Thru PR6007



6 AMP FAST RECOVERY RECTIFIER

FEATURES

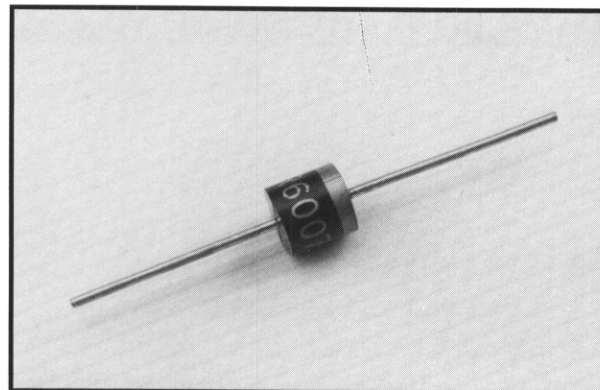
- Rating to 1000V PRV
- Low cost
- Diffused junction
- Low forward voltage drop
- High current capability
- Easily cleaned with freon, alcohol, chlorothene and similar solvents
- UL recognized 94V-O plastic material

Mechanical Data

- Case: Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.07 ounce, 2.1 grams
- Mounting Position: Any

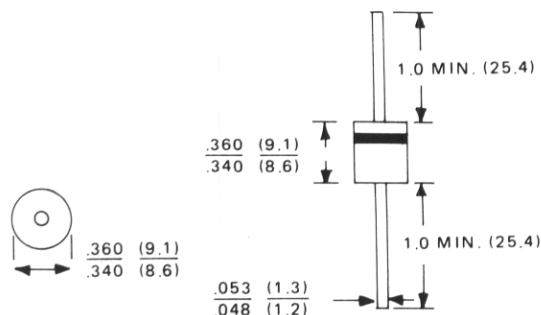
Maximum Ratings & Characteristics

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



Outline Drawing

R-6



Dimensions in inches and (millimeters)

| | | PR6001 | PR6002 | PR6003 | PR6004 | PR6005 | PR6006 | PR6007 | Units |
|--|-------------------|-------------|--------|--------|--------|--------|--------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current .375" (9.5mm) Lead Lengths @ T _A = 60° C | I _(AV) | 6.0 | | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave, Superimposed On Rated Load (JEDEC Method) | I _{FSM} | 300 | | | | | | | A |
| Maximum Forward Voltage At 6.0A DC | V _F | 1.2 | | | | | | | V |
| Maximum DC Reverse Current At Rated DC Blocking Voltage @ T _A 25 °C | I _R | 10 | | | | | | | μA |
| Maximum Reverse Recovery Time @ T _J = 25°C (Note 1) | t _{rr} | 150 | | | | 250 | 500 | | ns |
| Typical Junction Capacitance (Note 2) | C _J | 140 | | | | 70 | | | pF |
| Typical Thermal Resistance (Note 3) | R _{thJA} | 10 | | | | | | | °C/W |
| Operating Temperature Range | T _J | -65 to +150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -65 to +175 | | | | | | | °C |

- Notes: 1. Measured with I_F = 0.5A, I_R = 1A, I_{rr} = 0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC