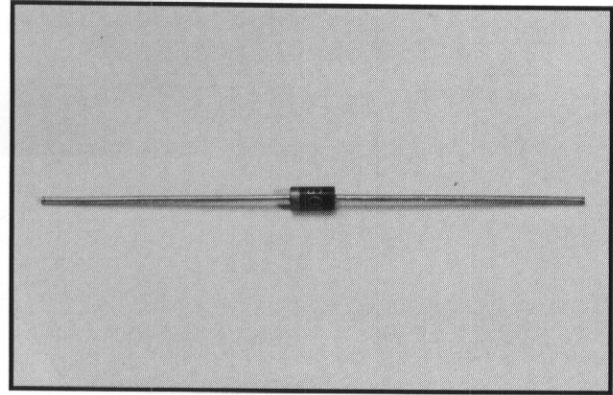


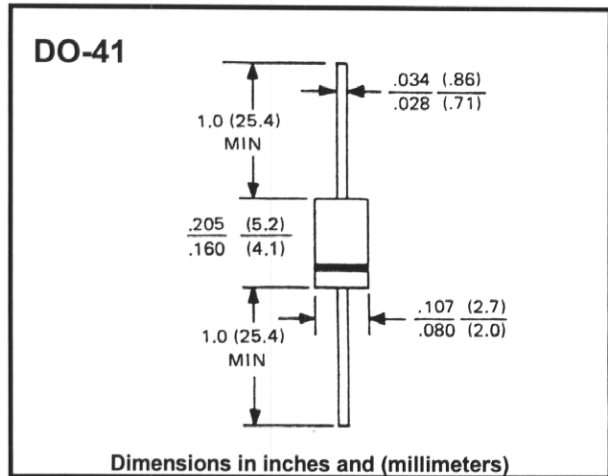
UF1001 Thru UF1007



1 AMP ULTRA FAST SWITCHING RECTIFIER



Outline Drawing



FEATURES

- Rating to 1000V PRV
- Low cost
- Ultrafast recovery time
- Low leakage
- 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: JEDEC DO-41 molded plastic
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.012 ounce, 0.3 grams

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%

| | | UF1001 | UF1002 | UF1003 | UF1004 | UF1005 | UF1006 | UF1007 | 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 = 55° C | I _(AV) | 1.0 | | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load | I _{FSM} | 30 | | | | | | | A |
| Maximum Forward Voltage At 1.0A DC | V _F | 1.0 | | 1.3 | | 1.7 | | | V |
| Maximum DC Reverse Current @ T _A = 25° C At Rated DC Blocking Voltage @ T _A = 100° C | I _R | 5 100 | | | | | | | μA |
| Maximum Reverse Recovery Time @ T _J = 25° C (Note 1) | t _{rr} | 50 | | | | 75 | | | nS |
| Typical Junction Capacitance (Note 2) T _A = 25° C | C _J | 20 | | | | 10 | | | pF |
| Typical Thermal Resistance | R _{thJA} | 25 | | | | | | | °C/W |
| Operating Temperature Range | T _J | -65 to +150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -65 to +175 | | | | | | | °C |

- Notes: 1. Measured at 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