



ELECTRONICS, INC.
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UF4001 thru UF4007 Fast Rectifiers DO-41 Type Package

Features:

- Low Forward Voltage Drop
- High Surge Current Capability
- High Reliability
- High Current Capability
- Super Fast Switching Speed

Maximum Ratings and Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Maximum Repetitive Reverse Voltage, V_{RRM}

| | |
|--------|-------|
| UF4001 | 50V |
| UF4002 | 100V |
| UF4003 | 200V |
| UF4004 | 400V |
| UF4005 | 600V |
| UF4006 | 800V |
| UF4007 | 1000V |

Maximum Average Forward Rectified Current ($T_A = +75^\circ\text{C}$, .375" Lead Length), $I_{F(AV)}$ 1.0A

Non-Repetitive Peak Forward Surge Current (8.3ms single half wave), I_{FSM} 30A

Power Dissipation, P_D 2.08W

Forward Voltage ($I_F = 1A$), V_F

| | |
|--------------------------------|------|
| UF4001, UF4002, UF4003, UF4004 | 1.0V |
| UF4005, UF4006, UF4007 | 1.7V |

Reverse Recovery Time ($I_F = 0.5A$, $I_R = 1A$, $I_{RR} = 0.25A$), t_{rr}

| | |
|--------------------------------|------|
| UF4001, UF4002, UF4003, UF4004 | 50ns |
| UF4005, UF4006, UF4007 | 75ns |

Reverse Current (at Rated V_R), I_R

| | |
|----------------------------|------------------|
| $T_A = +25^\circ\text{C}$ | 10 μA |
| $T_A = +100^\circ\text{C}$ | 50 μA |

Total Capacitance ($V_R = 4V$, $f = 1\text{MHz}$), C_T 17pF

Operating Temperature Range, T_{opr} -65° to $+150^\circ\text{C}$

Storage Temperature Range, T_{stg} -65° to $+150^\circ\text{C}$

Thermal Resistance, Junction-to-Ambient, R_{thJA} 60°C/W

Thermal Resistance, Junction-to-Lead, R_{thJL} 30°C/W

