

# UF1001 Thru UF1007



## 1 AMP ULTRA FAST SWITCHING RECTIFIER

### FEATURES

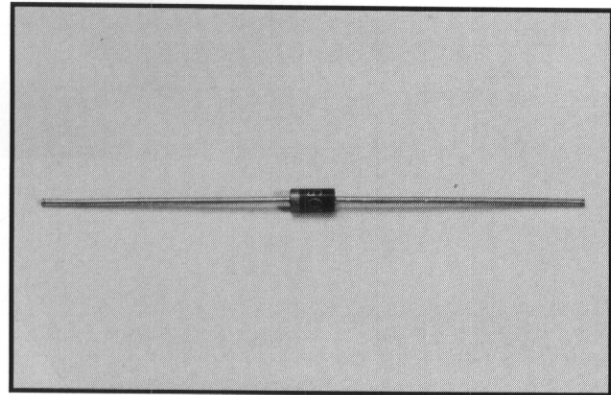
- Rating to 1000V PRV
- Low cost
- Ultrafast recovery time
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with freon, alcohol, chlorothene and similar solvents
- UL recognized 94V-O plastic material

### Mechanical Data

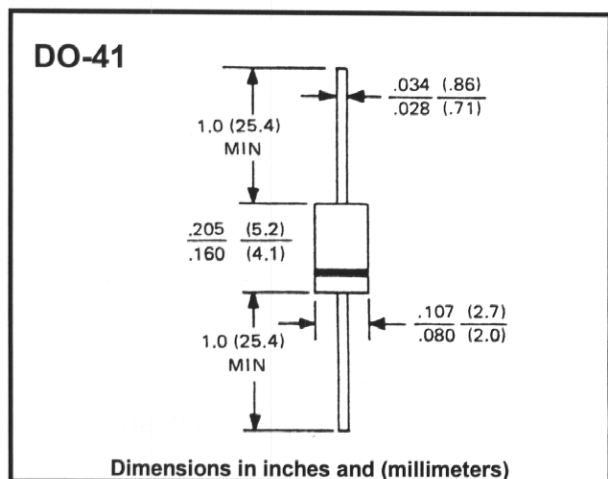
- Case: JEDEC DO-41 molded plastic
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.012 ounce, 0.3 grams

### 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%



### Outline Drawing



		UF1001	UF1002	UF1003	UF1004	UF1005	UF1006	UF1007	Units
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 .375 (9.5mm) Lead Lengths @ T <sub>A</sub> = 55° C	I <sub>(AV)</sub>	1.0							A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	30							A
Maximum Forward Voltage At 1.0A DC	V <sub>F</sub>	1.0		1.3		1.7			V
Maximum DC Reverse Current @ T <sub>A</sub> = 25° C At Rated DC Blocking Voltage @ T <sub>A</sub> = 100° C	I <sub>R</sub>	5 100							μA
Maximum Reverse Recovery Time @ T <sub>J</sub> = 25° C (Note 1)	t <sub>rr</sub>	50				75			nS
Typical Junction Capacitance (Note 2) T <sub>A</sub> = 25° C	C <sub>J</sub>	20				10			pF
Typical Thermal Resistance	R <sub>thJA</sub>	25							°C/W
Operating Temperature Range	T <sub>J</sub>	-65 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +175							°C

Notes: 1. Measured at I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1A, I<sub>rr</sub> = 0.25A  
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC