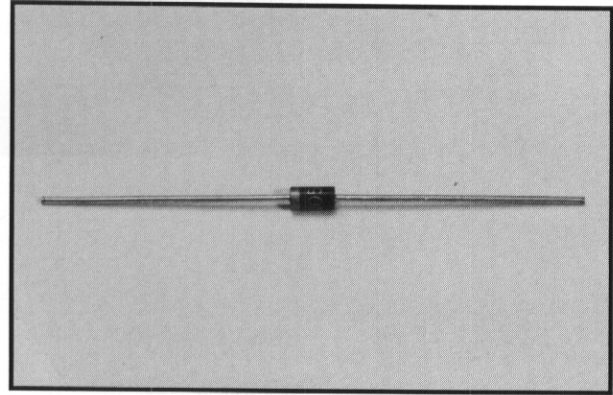


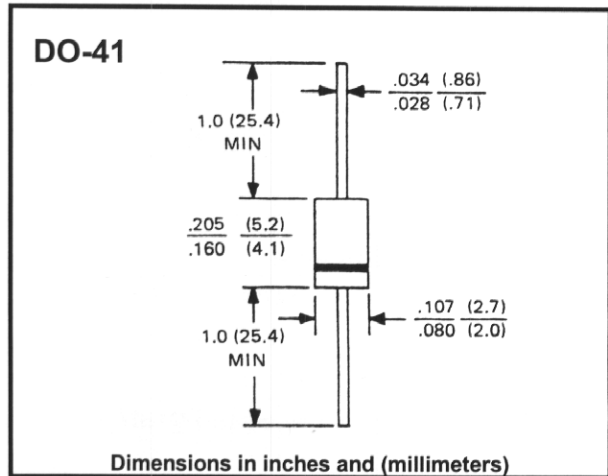
# UF1001 Thru UF1007



## 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 @ $T_A = 55^\circ C$	$I_{(AV)}$	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 @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 100^\circ C$	$I_R$	5 100							$\mu A$
Maximum Reverse Recovery Time @ $T_J = 25^\circ C$ (Note 1)	$t_{rr}$	50				75			nS
Typical Junction Capacitance (Note 2) $T_A = 25^\circ C$	$C_J$	20				10			pF
Typical Thermal Resistance	$R_{thJA}$	25							$^\circ C/W$
Operating Temperature Range	$T_J$	-65 to +150							$^\circ C$
Storage Temperature Range	$T_{STG}$	-65 to +175							$^\circ C$

- 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