

UF1001 Thru UF1007



1 AMP ULTRA FAST SWITCHING RECTIFIER

FEATURES

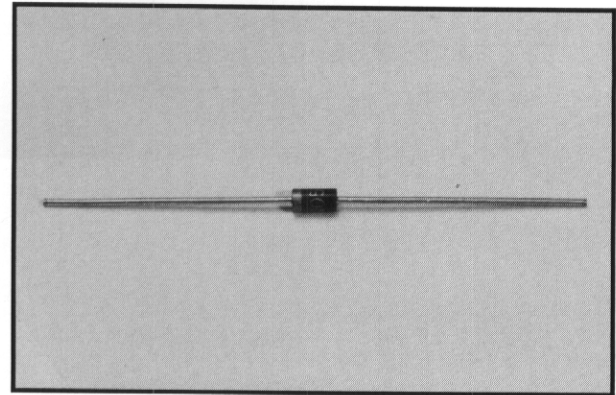
- Rating to 1000V PRV
- Low cost
- Ultrafast recovery time
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with freon, alcohol, chlorothene and similar solvents
- UL recognized 94V-O plastic material

Mechanical Data

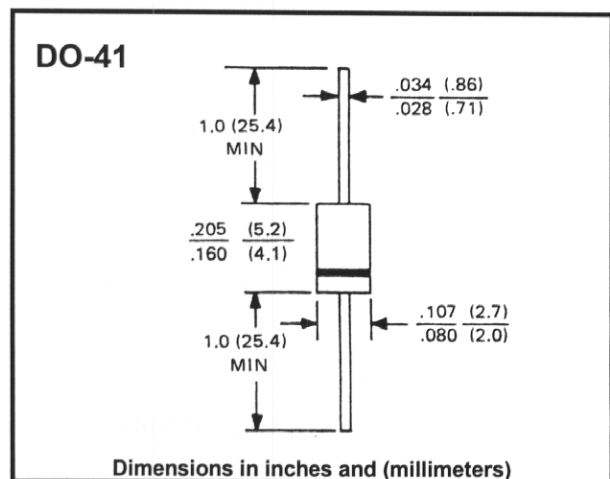
- Case: JEDEC DO-41 molded plastic
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.012 ounce, 0.3 grams

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 _{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 $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC