



UF3001 Thru UF3007

3 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, chloroethene and similar solvents
- UL recognized 94V-O plastic material

Mechanical Data

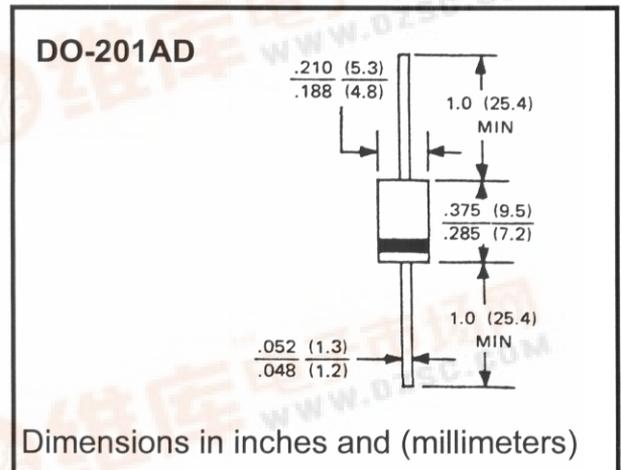
- Case: JEDEC DO-201AD molded plastic
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.04 ounce, 1.1 grams

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



		UF3001	UF3002	UF3003	UF3004	UF3005	UF3006	UF3007	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 @ $T_A = 55^\circ C$	$I_{(AV)}$	3.0							A	
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load	I_{FSM}	150							A	
Maximum Forward Voltage At 3.0A 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		μA
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	75				50			pF	
Typical Thermal Resistance	R_{thJA}	20							$^\circ C/W$	
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