

# PR3001 Thru PR3007



## 3 AMP FAST RECOVERY RECTIFIER

### FEATURES

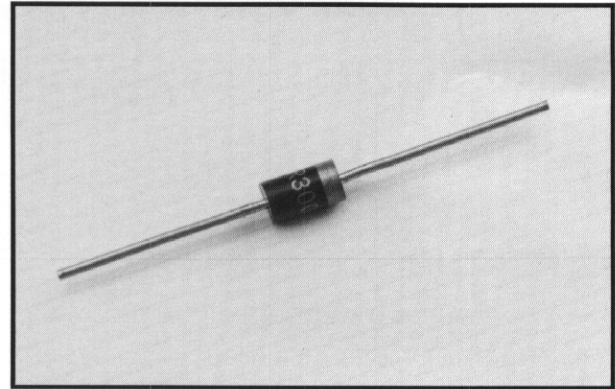
- Rating to 1000V PRV
- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with freon, alcohol, chlorothene and similar solvents
- UL recognized 94V-O plastic material

### Mechanical Data

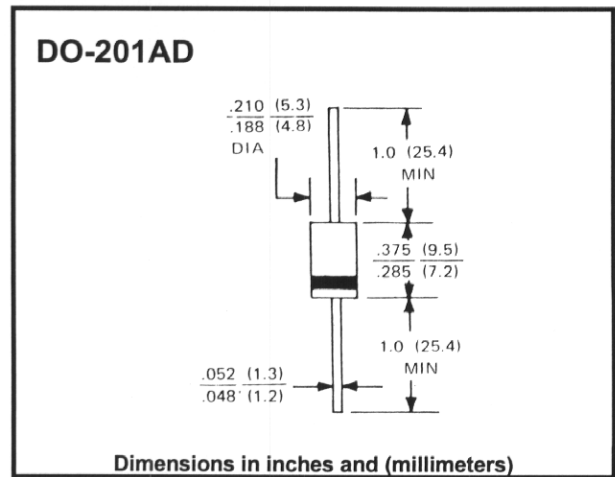
- Case: JEDEC DO-201AD
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.04 ounce, 1.1 grams

### 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



		PR3001	PR3002	PR3003	PR3004	PR3005	PR3006	PR3007	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 @ $T_A = 90^\circ C$	$I_{(AV)}$	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	$V_F$	1.2							V
Maximum DC Reverse Current @ $T_A = 25^\circ C$ At Rated DC Blocking Voltage @ $T_A = 100^\circ C$	$I_R$	200		300	400	500		$\mu A$	
Maximum Reverse Recovery Time @ $T_J = 25^\circ C$ (Note 1)	$t_{rr}$	150			250	500		ns	
Typical Junction Capacitance (Note 2)	$C_J$	50			25		pF		
Typical Thermal Resistance (Note 3)	$R_{thJA}$	15							$^\circ C/W$
Operating Temperature Range	$T_J$	-65 to +150							$^\circ C$
Storage Temperature Range	$T_{STG}$	-65 to +175							$^\circ C$

- Notes:
1. Measured with  $I_F = 0.5A$ ,  $I_R = 1A$ ,  $I_{rr} = 0.25A$
  2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC
  3. Thermal resistance Junction to Ambient