



# PR1001 Thru PR1007

## 1 AMP FAST RECOVERY RECTIFIER

### FEATURES

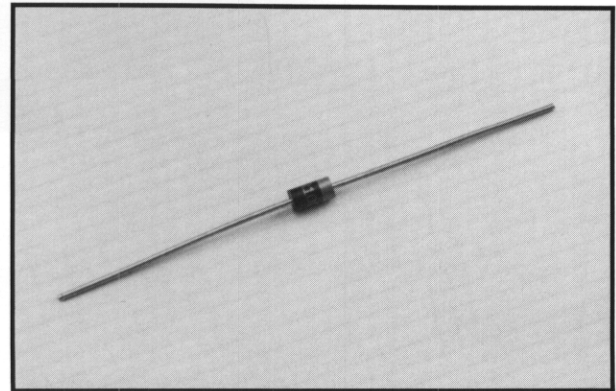
- Rating to 1000V PRV
- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with freon, alcohol, chlorothene and similar solvents
- UL recognized 94V-O plastic material

### Mechanical Data

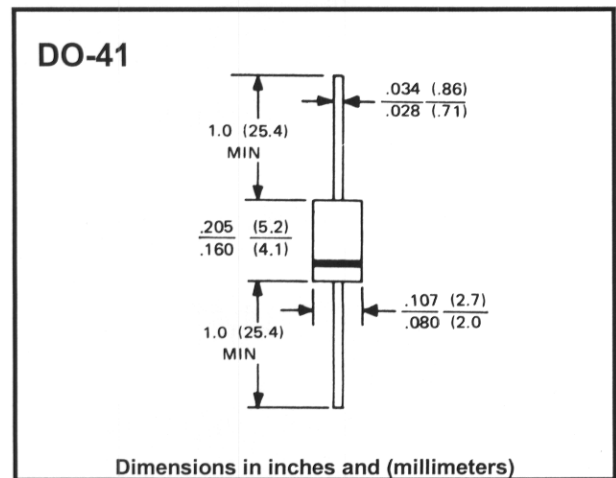
- Case: JEDEC DO-41
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.012 ounce, 0.3 grams

### 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



		PR1001	PR1002	PR1003	PR1004	PR1005	PR1006	PR1007	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 @ $T_A = 75^\circ\text{C}$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current @ $T_J = 125^\circ\text{C}$ 8.3 ms Single Half-Sine-Wave, Superimposed On Rated Load (JEDEC Method)	$I_{FSM}$	30							A
Maximum Forward Voltage At 1.0A DC	$V_F$	1.2							V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	$I_R$	5 100							$\mu\text{A}$
Maximum Reverse Recovery Time @ $T_A = 25^\circ\text{C}$ (Note 1)	$t_{rr}$	150				250	500		ns
Typical Junction Capacitance (Note 2)	$C_J$	15				8			pF
Typical Thermal Resistance (Note 3)	$R_{thJA}$	50							$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-65 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-65 to +175							$^\circ\text{C}$

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