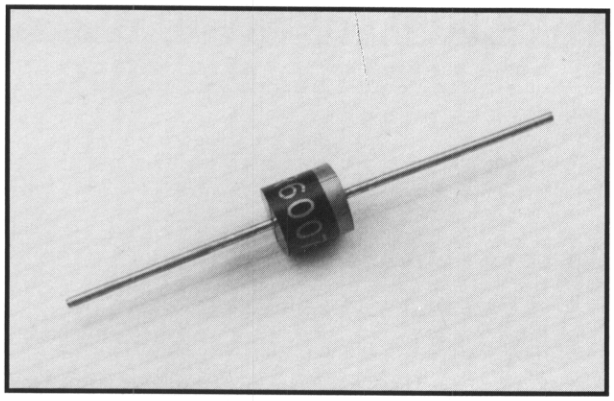
PR6001 Thru PR6007

6 AMP FAST RECOVERY RECTIFIER



FEATURES

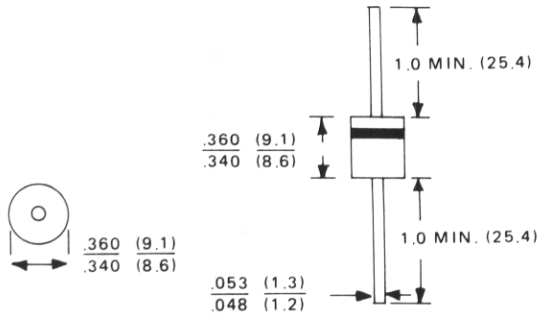
- Rating to 1000V PRV
- Low cost
- Diffused junction
- Low forward voltage drop
- High current capability
- Easily cleaned with freon, alcohol, chlorothene and similar solvents
- UL recognized 94V-O plastic material

Mechanical Data

- Case: Molded plastic
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.07 ounce, 2.1 grams
- Mounting Position: Any

Outline Drawing

R-6



Dimensions in inches and (millimeters)

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%

		PR6001	PR6002	PR6003	PR6004	PR6005	PR6006	PR6007	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 = 60° C	$I_{(AV)}$	6.0							A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave, Superimposed On Rated Load (JEDEC Method)	I_{FSM}	300							A
Maximum Forward Voltage At 6.0A DC	V_F	1.2							V
Maximum DC Reverse Current At Rated DC Blocking Voltage @ T_A 25 °C	I_R	10							µA
Maximum Reverse Recovery Time @ T_J = 25°C (Note 1)	t_{rr}	150				250	500		ns
Typical Junction Capacitance (Note 2)	C_J	140				70			pF
Typical Thermal Resistance (Note 3)	R_{thJA}	10							°C/W
Operating Temperature Range	T_J	-65 to +150							°C
Storage Temperature Range	T_{STG}	-65 to +175							°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