



Compact Technology

PR6001 thru PR6007

FAST RECOVERY RECTIFIERS

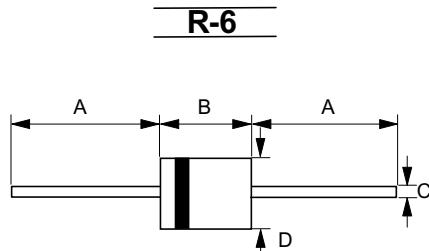
REVERSE VOLTAGE - 50 to 1000 Volts
FORWARD CURRENT - 6.0 Amperes

FEATURES

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0

MECHANICAL DATA

- Case : JEDEC R-6 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.07 ounces, 2.1 grams
- Mounting position : Any



R-6		
Dim.	Min.	Max.
A	25.4	-
B	8.60	9.10
C	1.20 Ø	1.30 Ø
D	8.60 Ø	9.10 Ø

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL 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%

CHARACTERISTICS	SYMBOL	PR6001	PR6002	PR6003	PR6004	PR6005	PR6006	PR6007	UNIT
Maximum Recurrent Peak Reverse Voltage	V _R RM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _R M _S	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _D C	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T _A =50°C	I(AV)				6.0				A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	I _{FSM}				300				A
Maximum forward Voltage at 6.0A DC	V _F			1.3					V
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C	I _R			10	150				uA uA
Maximum Reverse Recovery Time (Note 1)	T _{RR}		150		250	500			ns
Typical Junction Capacitance (Note 2)	C _J		140		70				pF
Typical Thermal Resistance (Note 3)	R _{θJA}		32						°C/W
Operating Temperature Range	T _J		-55 to +150						°C
Storage Temperature Range	T _{STG}		-55 to +150						°C

NOTES : 1. Measured with I_F=0.5A, I_R=1A, I_{RR}=0.25A.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal Resistance Junction to Ambient.

