

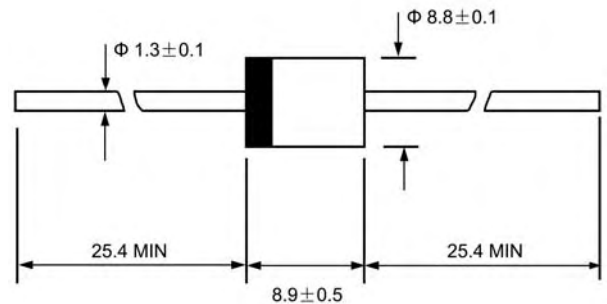
**VOLTAGE RANGE: 50 --- 1000 V**  
**CURRENT: 6.0 A**



**R - 6**

## Features

- ◇ Low cost
- ◇ Diffused junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0



Dimensions in millimeters

## Mechanical Data

- ◇ Case: JEDEC R-6, molded plastic
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.072 ounces, 2.04 grams
- ◇ Mounting position: Any

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

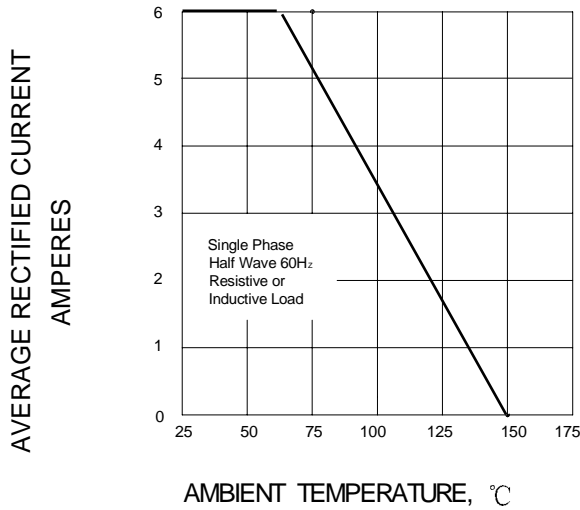
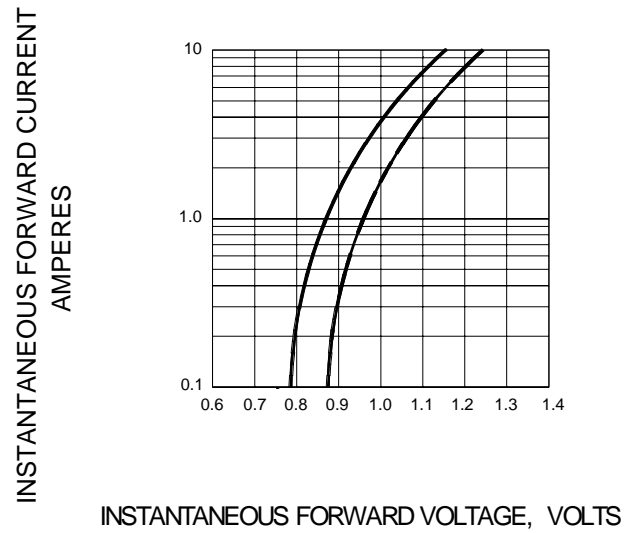
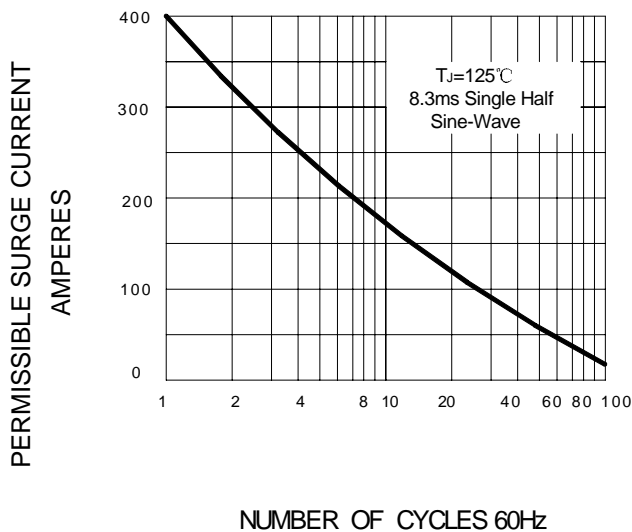
Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		P600 A	P600 B	P600 D	P600 G	P600 J	P600 K	P600 M	P600 S	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	1200	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	840	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	1200	V
Maximum average forward rectified current 9.5mm lead length, @ $T_A=60^\circ C$	$I_{F(AV)}$	6.0								A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$	$I_{FSM}$	400								A
Maximum instantaneous forward voltage @ 6.0 A	$V_F$	0.9						1.0		V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	$I_R$	5.0 1000								$\mu A$
Typical junction capacitance (Note1)	$C_J$	150								pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	20								$^\circ C/W$
Operating junction temperature range	$T_J$	-55-----+150								$^\circ C$
Storage temperature range	$T_{STG}$	-55-----+150								$^\circ C$

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient.

## Ratings AND Characteristic Curves

**FIG.1 – FORWARD DERATING CURVE**

**FIG.2 – TYPICAL FORWARD CHARACTERISTIC**

**FIG.3 - PEAK FORWARD SURGE CURRENT**

**FIG.4 – TYPICAL JUNCTION CAPACITANCE**
