

# P600G 6.0AMPS SILICON RECTIFIERS

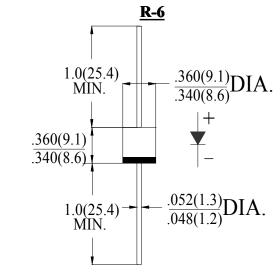
#### **FEATURE**

- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High surge capability
- . High temperature soldering guaranteed

 $260^{\circ}\text{C}$  /1 0sec/0.375" lead length at 5 lbs tension

### **MECHANICAL DATA**

- . Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
- . Polarity: color band denotes cathode
- . Mounting position: any



Dimensions in inches and (millimeters)

## 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%

Type Number	SYM BOL	P600G	units
Maximum Recurrent Peak Reverse Voltage	$V_{ m RRM}$	400	V
Maximum RMS Voltage	$V_{ m RMS}$	280	V
Maximum DC blocking Voltage	$V_{ m DC}$	400	V
Maximum Average Forward Rectified Current. 375" (9.5mm) lead length @T <sub>A</sub> =50°C	I <sub>F(AV)</sub>	6.0	A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load (JEDEC method)	<b>I</b> FSM	200.0	A
Maximum Forward Voltage at 6.0A DC	$ u_{ m F}$	1.0	V
Maximum DC Reverse Current $T_A = 25$ °C at rated DC blocking voltage $T_A = 100$ °C	<b>I</b> <sub>R</sub>	5.0 200.0	μА
Typical Junction Capacitance (Note1)	C <sub>J</sub>	100	pF
Typical Thermal Resistance (Note2)	$R_{(JA)}$	40	°C/W
Storage Temperature	T <sub>STG</sub>	-55 to +150	°C
Operation JunctionTemperature	<i>T</i> <sub>J</sub>	-55 to +150	°C

#### Note:

- 1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- 2. Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) lead length

## RATING AND CHARACTERISTIC CURVES (P600G)



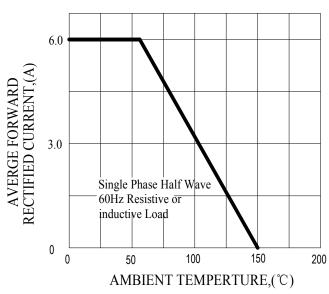


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

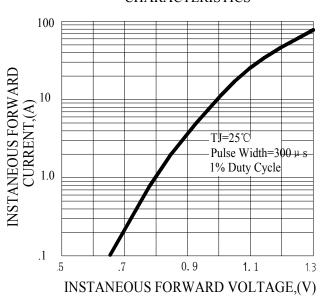


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

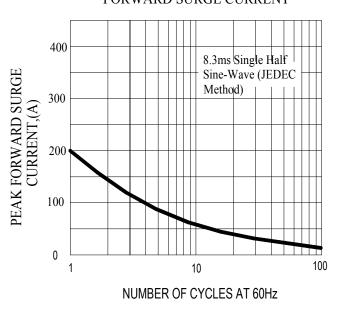
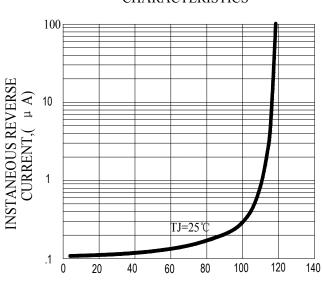


FIG.4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE,(%)