

PG600R THRU PG608R

GLASS PASSIVATED JUNCTION FAST SWITCHING RECTIFIER

VOLTAGE - 50 to 800 Volts CURRENT - 6.0 Amperes

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound
- Glass passivated junction in P600 package
- 6 ampere operation at $T_A=60\text{ }^{\circ}\text{C}$ with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Fast switching for high efficiency

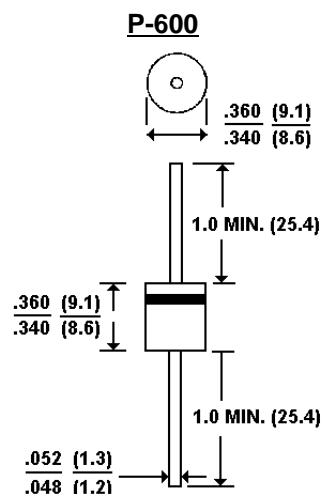
MECHANICAL DATA

Case: Molded plastic, P600

Terminals: axial leads, solderable per MIL-STD-202, Method 208

Mounting position: Any

Weight: 0.07 ounce, 2.1 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 $^{\circ}\text{C}$ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	PG600R	PG601R	PG602R	PG604R	PG606R	PG608R	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	V
Maximum RMS Voltage	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	V
Maximum Average Forward Rectified Current @ $T_A=60\text{ }^{\circ}\text{C}$	6.0						A
Peak Forward Surge Current 8.3ms single half sine wave I_{FSM} superimposed on rated load(JEDEC method)	250						A
Maximum Forward Voltage at 6.0A DC	1.3						V
Maximum DC Reverse Current at Rated DC $T_a=25\text{ }^{\circ}\text{C}$	5.0						$\mu\text{g A}$
Blocking Voltage @ $T_a=100\text{ }^{\circ}\text{C}$	500						
Maximum Reverse Recovery Time(Note 1)	150	150	150	150	250	500	ns
Typical Junction capacitance (Note 2)	300						pF
Typical Thermal Resistance at 0.375"(9.5mm)" lead length R θ_{KJA}	10.0						$^{\circ}\text{C/W}$
Operating and Storage Temperature Range T_A, T_J	-55 to +150						$^{\circ}\text{C}$

NOTES:

1. Reverse Recovery Test Conditions: $I_F=.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=.25\text{A}$
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES

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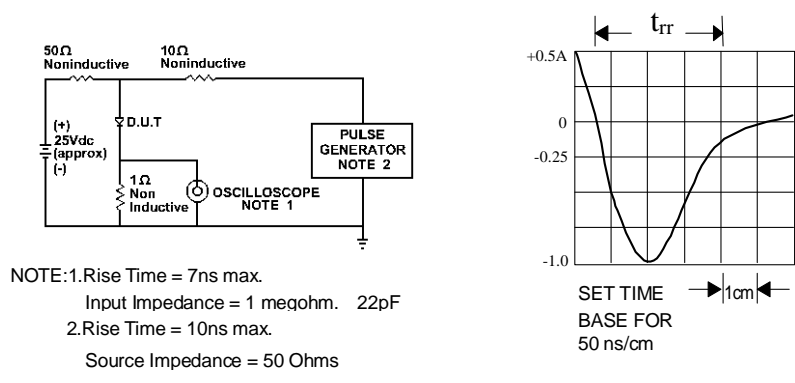


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

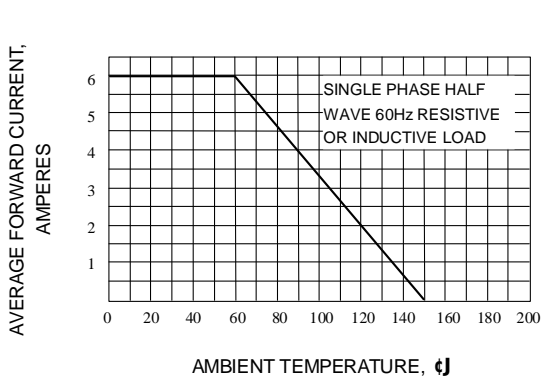


Fig. 2-FORWARD DERATING CURVE

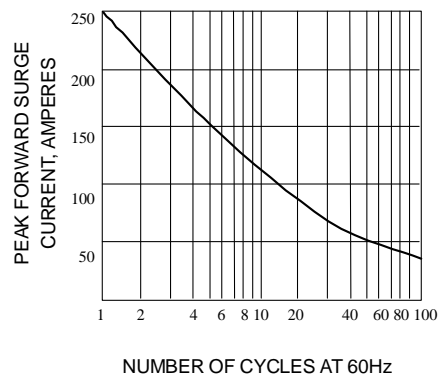


Fig. 3-PEAK FORWARD SURGE CURRENT

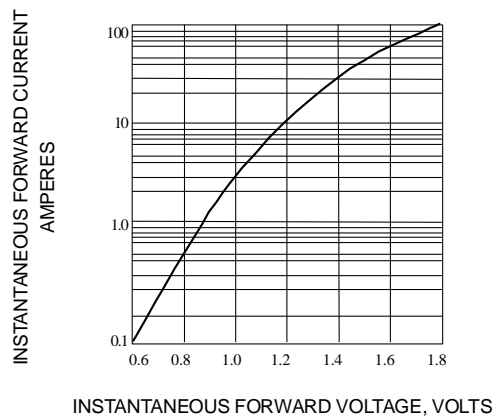


Fig. 4-TYPICAL FORWARD CHARACTERISTIC