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 ¢J with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Fast switching for high efficiency

MECHANICAL DATA

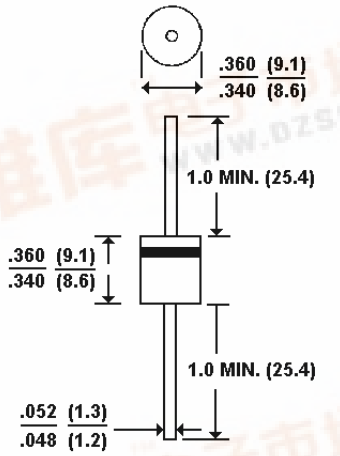
Case: Molded plastic, P600

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

Mounting position: Any

Weight: 0.07 ounce, 2.1 grams

P-600



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J 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 ¢J	6.0						A
Peak Forward Surge Current 8.3ms single half sine wave I_{FSM} superimposed on rated load(JECEC method)	250						A
Maximum Forward Voltage at 6.0A DC	1.3						V
Maximum DC Reverse Current at Rated DC T_a=25 ¢J Blocking Voltage @ T_a=100 ¢J	5.0 500						£g A
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 £KJA	10.0						¢J/W
Operating and Storage Temperature Range T_A , T_J	-55 to +150						¢J

NOTES:

1. Reverse Recovery Test Conditions: I_F=.5A, I_R=1A, Irr=.25A
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES

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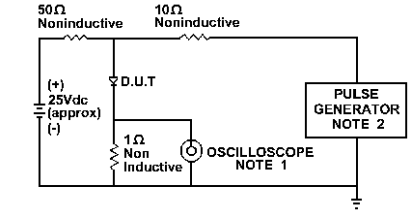

NOTE:1.Rise Time = 7ns max.
Input Impedance = 1 megohm. 22pF
2.Rise Time = 10ns max.
Source Impedance = 50 Ohms

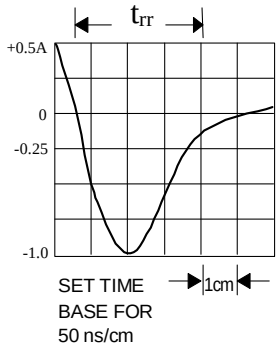

Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

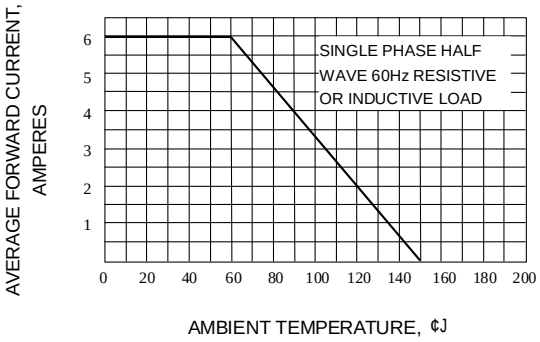

Fig. 2-FORWARD DERATING CURVE

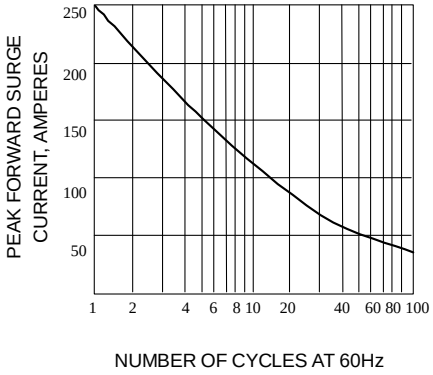

Fig. 3-PEAK FORWARD SURGE CURRENT

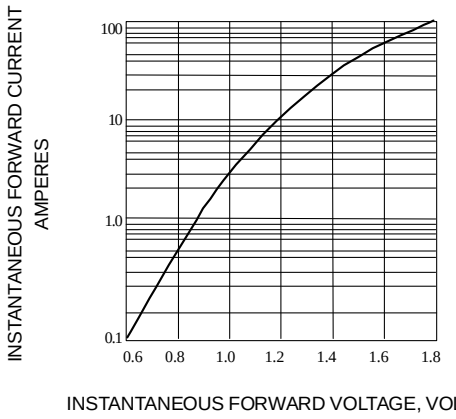

Fig. 4-TYPICAL FORWARD CHARACTERISTIC