PS600R THRU PS608R

FAST SWITCHING RECOVERY RECTIFIER

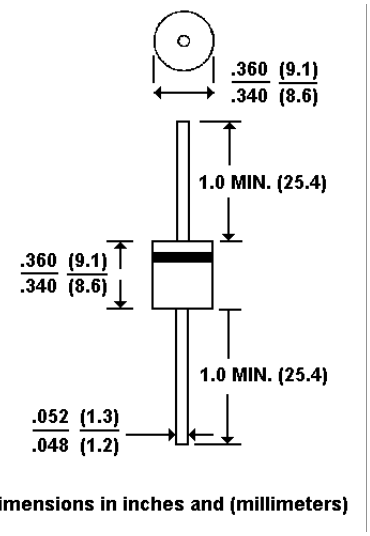
VOLTAGE - 50 to 800 Volts CURRENT - 6.0 Amperes

FEATURES

- Low cost
- Diffused junction
- Low forward voltage drop
- High current capability

  Fast switching for high efficiency
- The plastic meterial carries U/L recognition 94V-O
- Exceeds environmental standards of MIL-S-19500/228

P600



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic, P600

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

Polarity: Color Band denotes cathode

Mounting Position: Any

Weight: 0.07 ounce, 2.1 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ¢J ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

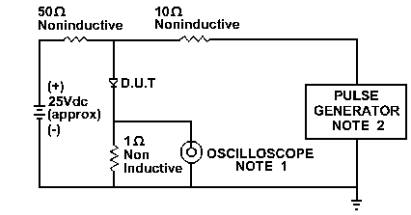
	PS600R	PS601R	PS602R	PS604R	PS606R	PS608R	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	V
Maximum RMS Voltage	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	V
Maximum Average Forward Rectified Current @T_A=55 ¢J	6.0						A
Peak Forward Surge Current 8.3ms single half sine-wave I_{FSM} superimposed on rated load (JEDEC method)	300						A
Maximum Forward Voltage at 6.0A DC	1.3						V
Maximum DC Reverse Current at Rated T_J=25 ¢J DC Blocking Voltage T_J=100 ¢J	10.0 1000						£g A £g A
Maximum Reverse Recovery Time(Note 1)	150			250	500		ns
Typical Junction capacitance (Note 2)	140			300			pF
Typical Thermal Resistance at 0.375"(9.5mm) lead length R £KJA	10.0						¢J/W
Operating and Storage Temperature Range T_J ¡BT_A	-55 TO +150						¢J

NOTES:

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

RATING AND CHARACTERISTIC CURVES

PS600R THRU PS608R



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

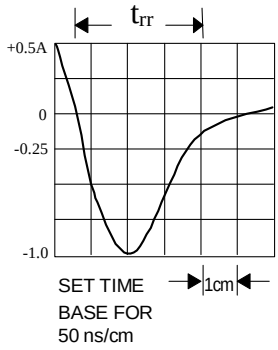


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

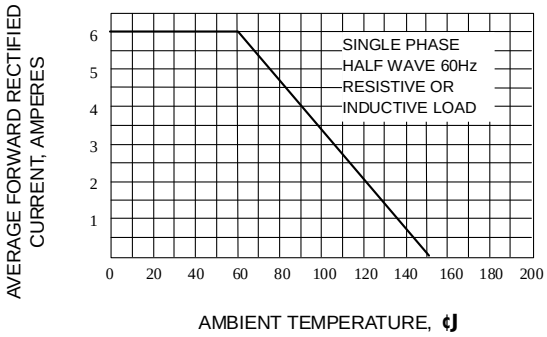


Fig. 2-FORWARD CHARACTERISTICS

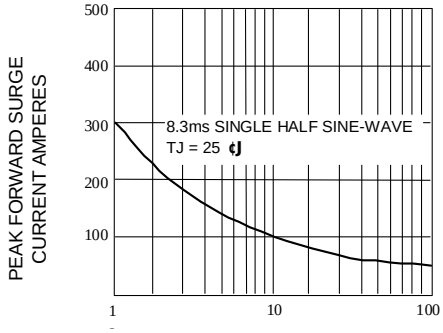


Fig. 3-FORWARD CURRENT DERATING CURVE

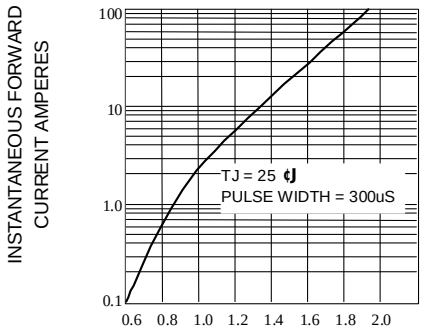


Fig. 4-TYPICAL FORWARD CHARACTERISTIC