



# TE 600A THRU TE 600K

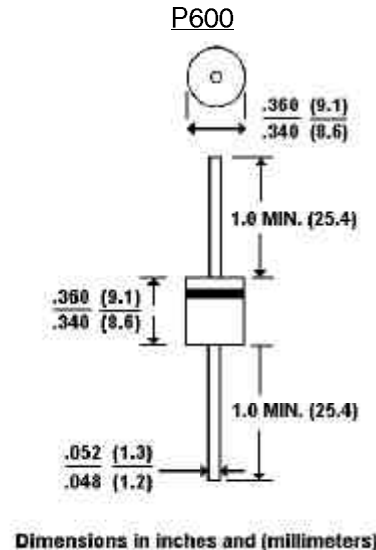
GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER  
 VOLTAGE - 50 to 800 Volts CURRENT - 6.0 Amperes

## FEATURES

- High surge current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 Utilizing Flame Retardant Epoxy Molding Compound
- Glass passivated junction in P600 package
- High current operation 6.0 Amperes @  $T_A=75\text{ }^\circ\text{C}$
- Exceeds environmental standards of MIL-S-19500/228

## 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

\* @  $T_A=25\text{ }^\circ\text{C}$  unless otherwise specified. Single phase, half-wave, 60 Hz, resistive or inductive load.

\*\*All values except Maximum RMS Voltage are registered JEDEC parameters.

	TE 600A	TE 600B	TE 600D	TE 600G	TE 600J	TE 600K	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 at $T_A=75\text{ }^\circ\text{C}$	6.0						A
Maximum Overload Surge Current at 1 cycle (NOTE 1)	300						A
Maximum Forward Voltage at 6.0 ADC	1.0						V
Maximum Full Load Reverse Current Full Cycle Average at 25 $^\circ\text{C}$	10						$\mu\text{A}$
Maximum DC Reverse Current at Rated DC Blocking Voltage and 100 $^\circ\text{C}$	0.3						$\text{mA}$
Typical Junction capacitance (Note 2) $C_J$	150.0						$\text{pF}$
Typical Thermal Resistance (Note 3) $R_{\theta\text{JKJA}}$	20.0						$^\circ\text{C}/\text{W}$
Typical Thermal Resistance (Note 3) $R_{\theta\text{JKJL}}$	4.0						$^\circ\text{C}/\text{W}$
Operating Temperature Range	-55 to +150						$^\circ\text{C}$
Storage Temperature Range	-55 to +150						$^\circ\text{C}$

## NOTES:

1. Peak forward surge current, per 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts
3. Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length P.C.B. mounted with 1.1x1.1 (30x30mm) copper pads

RATING AND CHARACTERISTIC CURVES  
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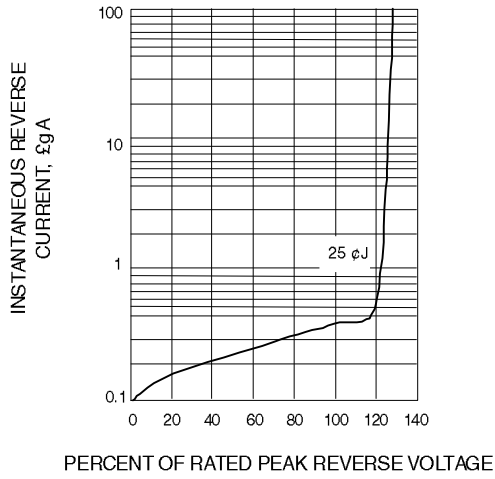


Fig. 1-TYPICAL REVERSE CHARACTERISTICS

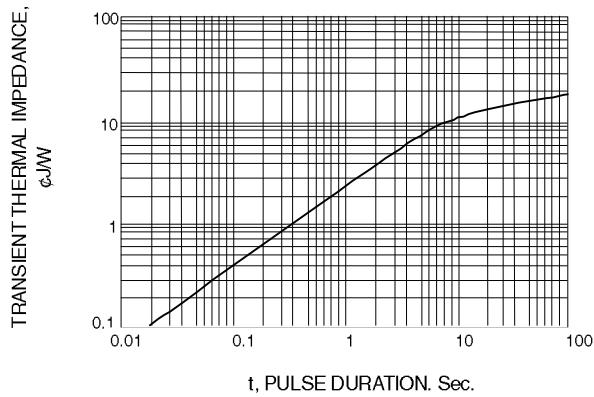


Fig. 3-TYPICAL TRANSIENT THERMAL IMPEDANCE

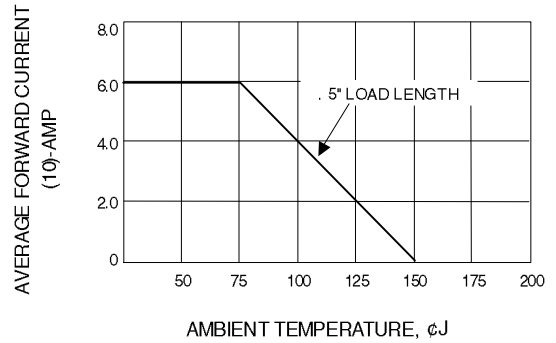


Fig. 2-FORWARD DERATING CURVE

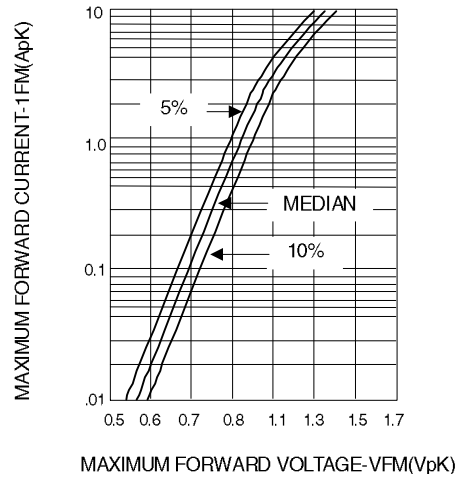


Fig. 4-TYPICAL FORWARD CHARACTERISTICS

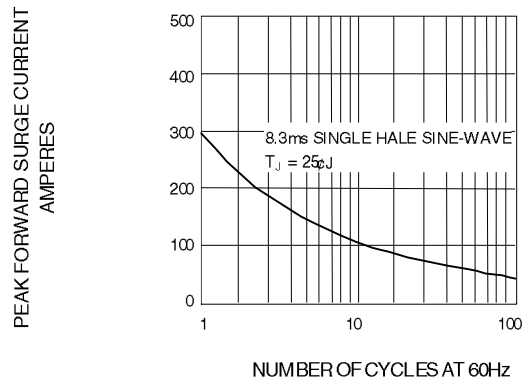


Fig. 5-PEAK FORWARD SURGE CURRENT