



**TRANSYS  
ELECTRONICS  
LIMITED**

## TE 600A THRU TE 600K

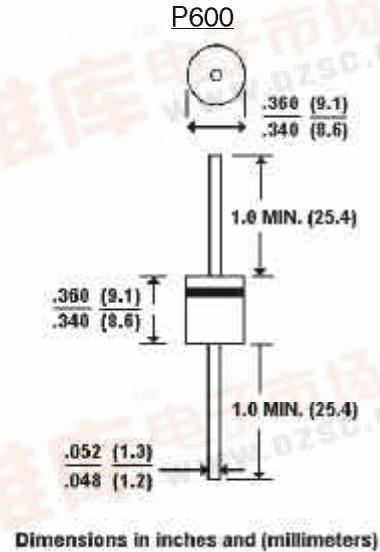
GLASS PASSIVATED JUNCTION PLASTIC RECTIFIER  
VOLTAGE - 50 to 800 Volts CURRENT - 6.0 Amperes

### 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 @  $T_A=75^\circ\text{C}$
- 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

\* @  $T_A=25^\circ\text{C}$  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 $T_A=75^\circ\text{C}$             | 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         |         |         |         |         |         | $\mu\text{A}$      |
| Typical Junction capacitance (Note 2) $C_J$                                     | 150.0       |         |         |         |         |         | pF                 |
| Typical Thermal Resistance (Note 3) $R_{\theta\text{KJA}}$                      | 20.0        |         |         |         |         |         | $^\circ\text{C/W}$ |
| Typical Thermal Resistance (Note 3) $R_{\theta\text{KJL}}$                      | 4.0         |         |         |         |         |         | $^\circ\text{C/W}$ |
| Operating Temperature Range                                                     | -55 to +150 |         |         |         |         |         | $^\circ\text{C}$   |
| Storage Temperature Range                                                       | -55 to +150 |         |         |         |         |         | $^\circ\text{C}$   |

### NOTES:

- Peak forward surge current, per 8.3ms single half-sine-wave superimposed on rated load(JECED method)
- Measured at 1 MHZ and applied reverse voltage of 4.0 volts
- 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  
TE 600A THRU TE 600K

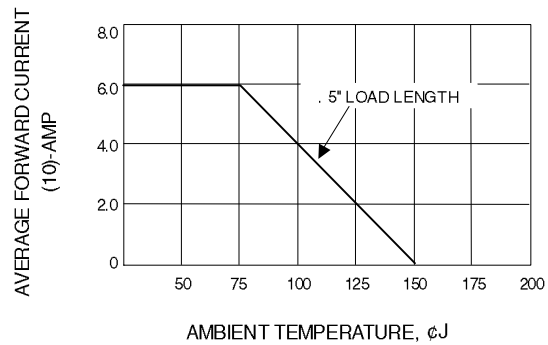
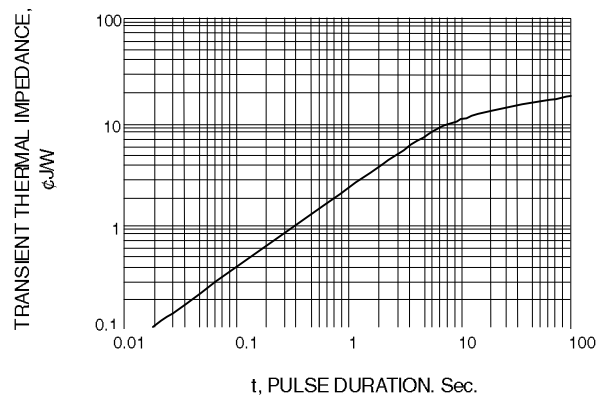
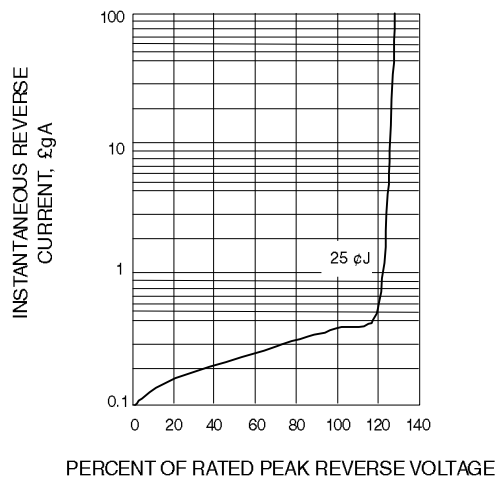


Fig. 2-FORWARD DERATING CURVE

