



DATA SHEET

PG600A~PG600M

GLASS PASSIVATED JUNCTION PLASTIC RECTIFIERS

VOLTAGE 50 to 1000 Volts **CURRENT** 6.0 Amperes

P-600

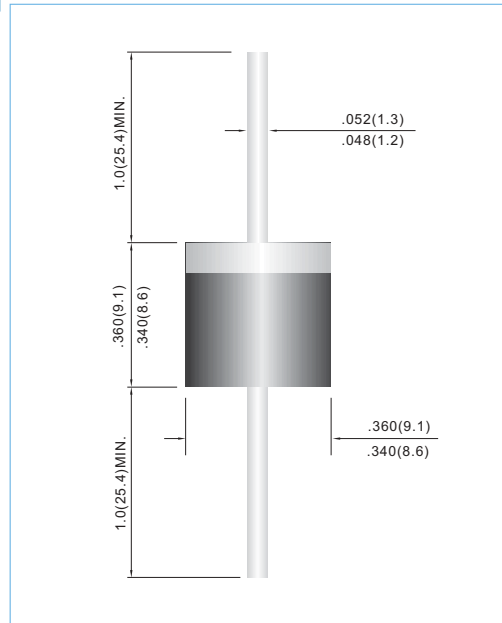
Unit: inch(mm)

FEATURES

- High surge current capability.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

Case: Molded plastic, P600
 Terminals: Axial leads, solderable to MIL-STD-202, Method 208
 Polarity: Color Band denotes cathode end
 Mounting Position: Any
 Weight: 0.07 ounce, 2.1 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Resistive or inductive load, 60Hz.

| PARAMETER | SYMBOL | PG600A | PG600B | PG600D | PG600G | PG600J | PG600K | PG600M | UNITS |
|--|------------------------------------|-------------|--------|--------|--------|--------|--------|--------|----------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Current .375"(9.5mm) lead length at $T_A=55^\circ C$ | I_{AV} | 6.0 | | | | | | | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method) (Note 1) | I_{FSM} | 300 | | | | | | | A |
| Maximum Forward Voltage at 6.0A | V_F | 1.0 | | | | | | | V |
| Maximum DC Reverse Current $T_A=25^\circ C$ at Rated DC Blocking Voltage $T_A=100^\circ C$ | I_R | 10 300 | | | | | | | μA |
| Typical Junction capacitance (Note 2) | C_J | 150 | | | | | | | pF |
| Typical Thermal Resistance(Note 3) | $R_{\theta JA}$ $R_{\theta JL}$ | 20 4.0 | | | | | | | $^\circ C / W$ |
| Operating and Storage Temperature Range T_J, T_{STG} | T_J, T_{STG} | -55 TO +150 | | | | | | | $^\circ C$ |

- 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 VDC
 3. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted with 1.1 x 1.1 (30 x 30mm)copper pads.



RATING AND CHARACTERISTIC CURVES

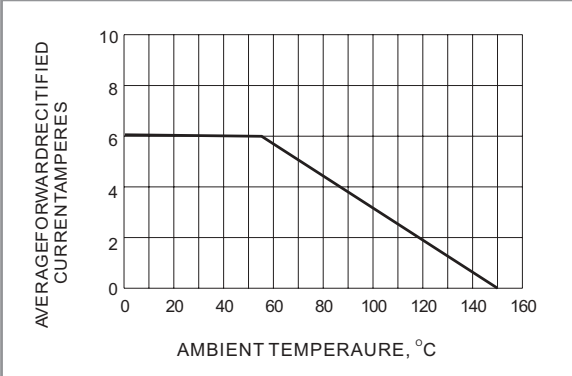


Fig.1- FORWARD CURRENT DERATING CURVE

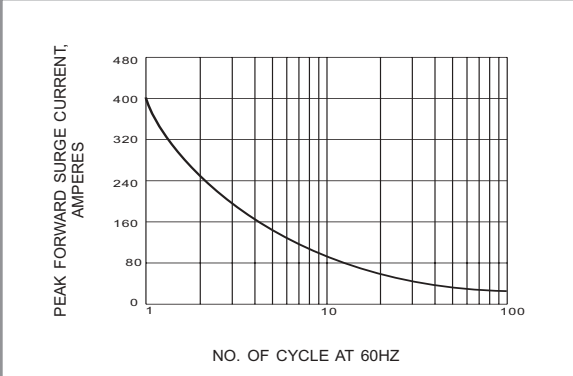


Fig.2- MAXIMUM FORWARD SURGE CURRENT

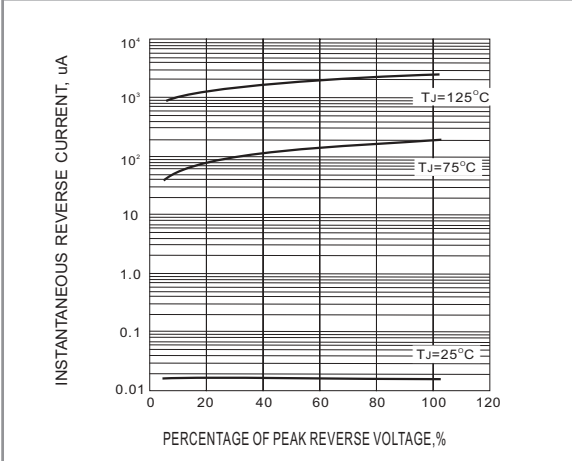


Fig.3- TYPICAL REVERSE CHARACTERISTIC

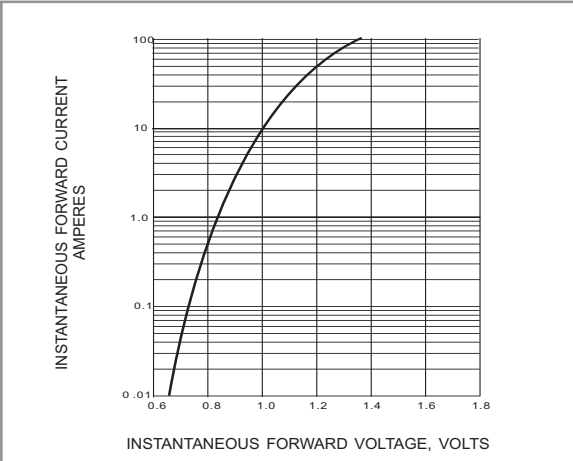


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC