



HITANO ENTERPRISE CORP.

6A05G THRU 6A10G

TECHNICAL SPECIFICATIONS OF GLASS PASSIVATED RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts

CURRENT - 6.0 Amperes

FEATURES

- * Low cost
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * High surge current capability

MECHANICAL DATA

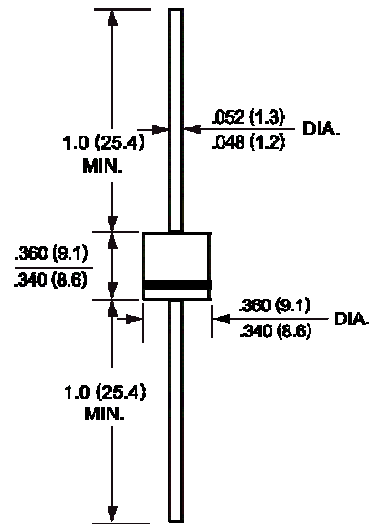
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 2.08 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.



R-6



Dimensions in inches and (millimeters)

| | SYMBOL | 6A05G | 6A1G | 6A2G | 6A4G | 6A6G | 6A8G | 6A10G | UNITS |
|---|-----------------------|--------------|------|------|------|------|------|-------|--------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Current at $T_A = 60^\circ C$ | I_o | 6.0 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 400 | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage at 6.0A DC | V_F | 1.1 | | | | | | | Volts |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | @ $T_A = 25^\circ C$ | 10 | | | | | | | uAmps |
| | @ $T_A = 100^\circ C$ | 500 | | | | | | | |
| Maximum Full Load Reverse Current Average Full Cycle .375*(9.5mm) lead length at $T_L = 75^\circ C$ | I_R | 50 | | | | | | | uAmps |
| Typical Junction Capacitance (Note) | C_J | 150 | | | | | | | pF |
| Typical Thermal Resistance | $R_{\theta JA}$ | 10 | | | | | | | $^\circ C/W$ |
| Operating and Storage Temperature Range | T_J, T_{STG} | -65 to + 175 | | | | | | | $^\circ C$ |

NOTES : Measured at 1 MHz and applied reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES (6A05G THRU 6A10G)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

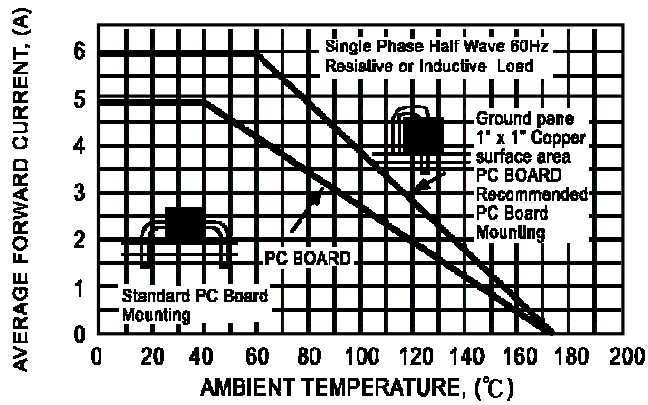


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

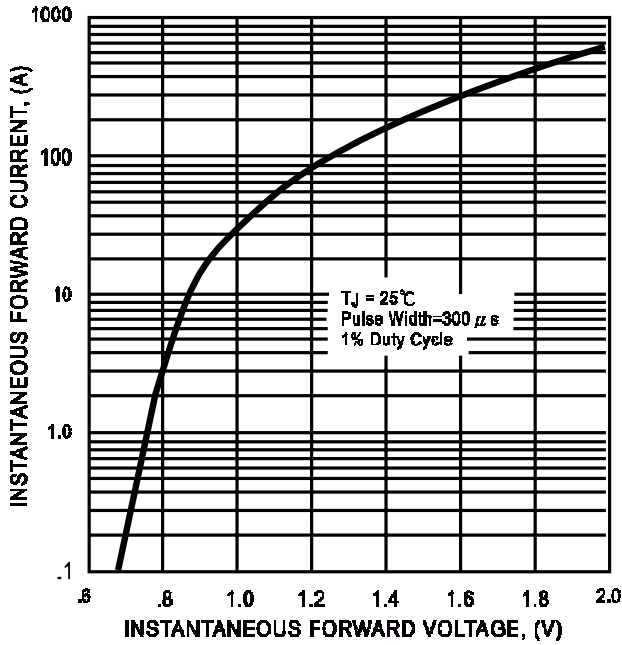


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

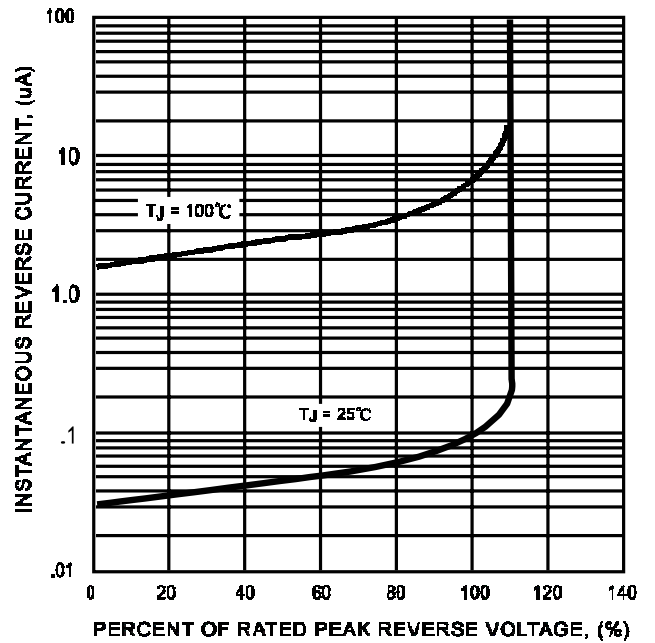


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

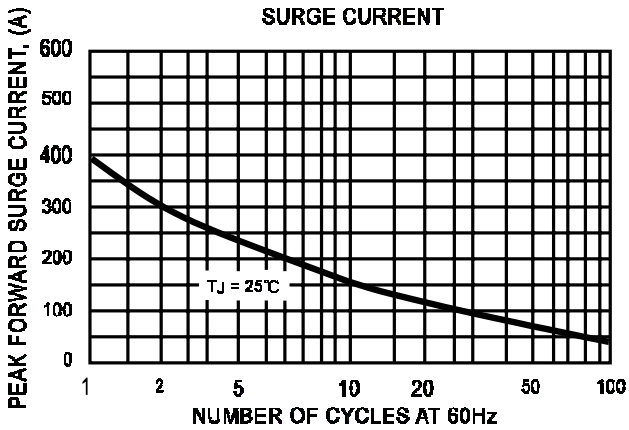


FIG. 5 - TYPICAL THERMAL RESISTANCE VS LEAD LENGTH

