

HER601G THRU HER608G

HIGH EFFICIENCY PLASTIC RECTIFIER

VOLTAGE: 50-1000V

CURRENT: 6.0A

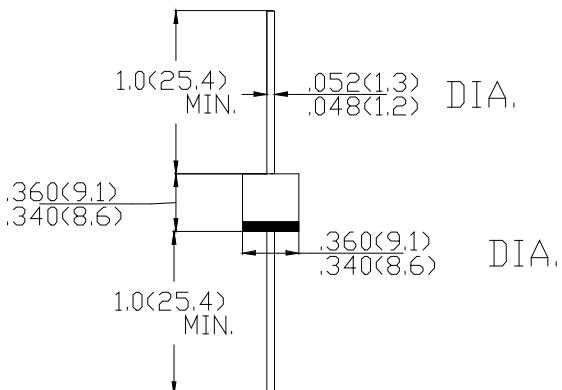
FEATURES

- Low power loss, high efficiency
- Low leakage
- Low forward voltage
- High current capability
- High speed switching
- High surge capability
- High reliability

MECHANICAL DATA

- **Case:** Molded plastic
- **Epoxy:** UL94V-0 rate flame retardant
- **Lead:** MIL-STD- 202E, Method 208 guaranteed
- **Polarity:** Color band denotes cathode end
- **Mounting position:** Any
- **Weight:** 1.20 grams

R-6



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRONICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

| | SYMBOL | HER 601G | HER 602G | HER 603G | HER 604G | HER 605G | HER 606G | HER 607G | HER 608G | units | | | | |
|---|-----------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------|--|--|--|--|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V | | | | |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 210 | 280 | 420 | 560 | 700 | V | | | | |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V | | | | |
| Maximum Average Forward rectified Current at $T_A=50^\circ C$ | I_o | 6.0 | | | | | | | | A | | | | |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | I_{FSM} | 180 | | | | 150 | | | | A | | | | |
| Maximum Instantaneous forward Voltage at 6.0A DC | V_F | 1.0 | | 1.3 | | 1.7 | | V | | | | | | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A=25^\circ C$ | I_R | 10 | | | | | | | | μA | | | | |
| Maximum Full Load Reverse Current Full Cycle Average,.375"(9.5mm) lead length at $T_L=55^\circ C$ | | 150 | | | | | | | | | | | | |
| Maximum Reverse Recovery Time (Note 1) | t_{rr} | 50 | | | | 75 | | | | ns | | | | |
| Typical Junction Capacitance (Note 2) | C_J | 30 | | | | 20 | | | | pF | | | | |

Notes: 1.Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

2.Measured at 1MHz and applied reverse voltage of 4.0 volts