



# HERA801G THRU HERA808G

## 8.0 AMPS. Glass Passivated High Efficient Rectifiers



Voltage Range  
50 to 1000 Volts  
Current  
8.0 Amperes

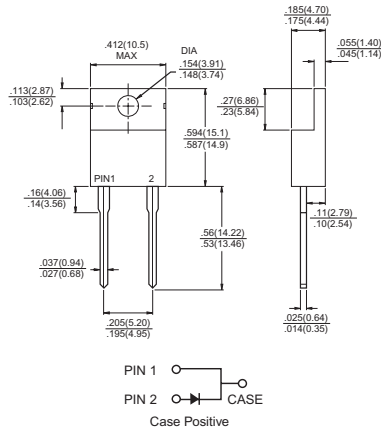
### Features

- ✧ Low forward voltage drop
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability

### Mechanical Data

- ✧ Cases: Molded plastic
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Terminals: Leads solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed: 260°C/10 seconds .16", (4.06mm) from case.
- ✧ Weight: 2.24 grams

### TO-220A



**Dimensions in inches and (millimeters)**

### Maximum Rating and Electrical Characteristics

Rating 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%

| Type Number  | Symbol          | HERA 801G   | HERA 802G | HERA 803G | HERA 804G | HERA 805G | HERA 806G | HERA 807G | HERA 808G | 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 .375"(9.5mm) Lead Length @ $T_C = 100^\circ C$           | $I_{(AV)}$      | 8.0         |           |           |           |           |           |           |           | A                  |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | $I_{FSM}$       | 150         |           |           |           |           |           |           |           | A                  |
| Maximum Instantaneous Forward Voltage @ 8.0A   | $V_F$           | 1.0         |           | 1.3       |           | 1.7       |           |           | V         |                    |
| Maximum DC Reverse Current @ $T_A = 25^\circ C$ at Rated DC Blocking Voltage @ $T_A = 125^\circ C$ | $I_R$           | 10.0<br>400 |           |           |           |           |           |           |           | $\mu A$<br>$\mu A$ |
| Maximum Reverse Recovery Time (Note 1)   | $T_{rr}$        | 50          |           |           |           | 80        |           |           | nS        |                    |
| Typical Junction Capacitance (Note 2)  | $C_j$           | 65          |           |           |           | 55        |           |           | pF        |                    |
| Typical Thermal Resistance (Note 3)  | $R_{\theta JC}$ | 2.0         |           |           |           |           |           |           |           | $^{\circ}C/W$      |
| Operating Temperature Range  | $T_J$           | -65 to +150 |           |           |           |           |           |           |           | $^{\circ}C$        |
| Storage Temperature Range  | $T_{STG}$       | -65 to +150 |           |           |           |           |           |           |           | $^{\circ}C$        |

Notes: 1. Reverse Recovery Test Conditions:  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{RR} = 0.25A$   
 2. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.  
 3. Mounted on Heatsink Size of 2 in x 3 in x 0.25 in Al-Plate.

## RATINGS AND CHARACTERISTIC CURVES (HERA801G THRU HERA808G)

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

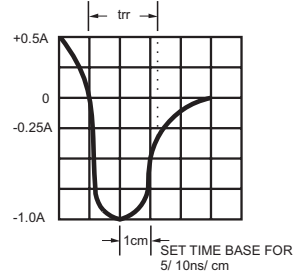
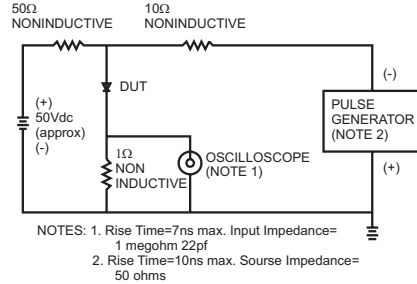


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

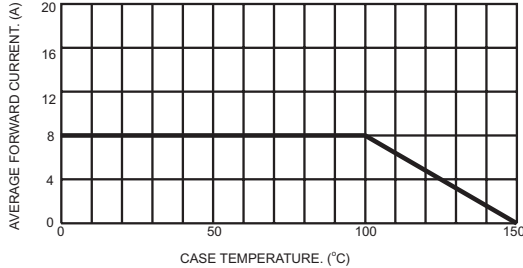


FIG.3- TYPICAL REVERSE CHARACTERISTICS

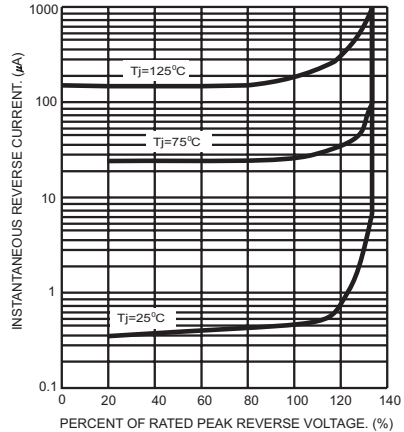


FIG.4- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

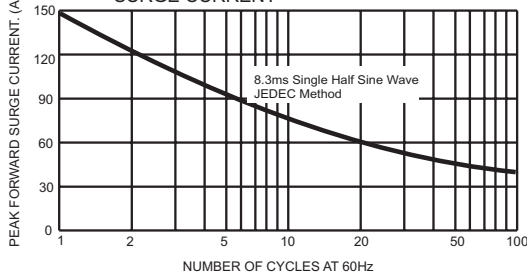


FIG.6- TYPICAL FORWARD CHARACTERISTICS

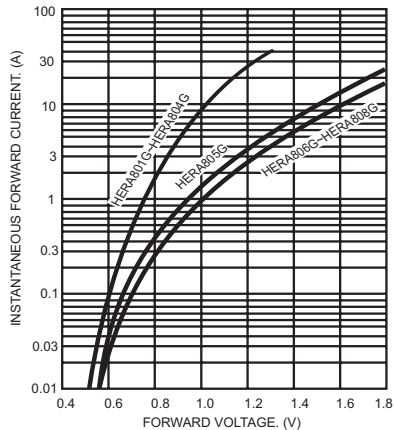


FIG.5- TYPICAL JUNCTION CAPACITANCE

