



# HER801G THRU HER808G

8.0 AMPS. Glass Passivated High Efficient Rectifiers



Voltage Range  
50 to 1000 Volts  
Current  
8.0 Amperes

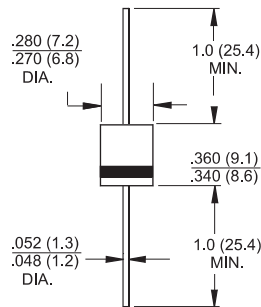
## Features

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

## Mechanical Data

- ✧ Case: Molded plastic
- ✧ Epoxy: UL 94V-O rate flame retardant
- ✧ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode end
- ✧ High temperature soldering guaranteed: 260°C/10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Mounting position: Any
- ✧ Weight: 1.65 grams

### R-6



Dimensions in inches and (millimeters)

## Maximum Ratings 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     | HER 801G    | HER 802G | HER 803G | HER 804G | HER 805G | HER 806G | HER 807G | HER 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 @ $T_A = 55^\circ C$            | $I_{(AV)}$ | 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 |          |          |          |          |          |          |          | <br>uA |    |
| Maximum Reverse Recovery Time ( Note 1 )   | $T_{rr}$   | 50          |          |          |          |          | 80       |          |          | nS     |    |
| Typical Junction Capacitance ( Note 2 )  | $C_j$      | 100         |          |          |          |          | 65       |          |          | pF     |    |
| Operating Temperature Range  | $T_J$      | -65 to +150 |          |          |          |          |          |          |          |        | °C |
| Storage Temperature Range  | $T_{STG}$  | -65 to +150 |          |          |          |          |          |          |          |        | °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 4.0 V D.C.

## RATINGS AND CHARACTERISTIC CURVES (HER801G THRU HER808G)

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

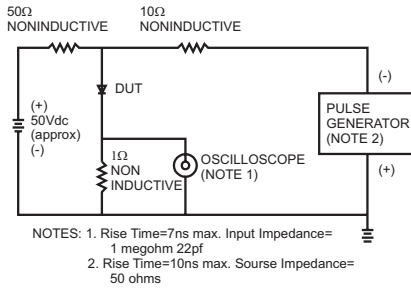


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

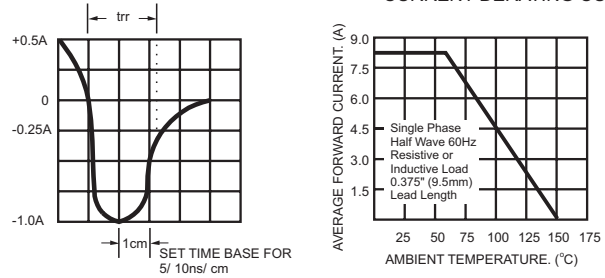


FIG.3- TYPICAL REVERSE CHARACTERISTICS

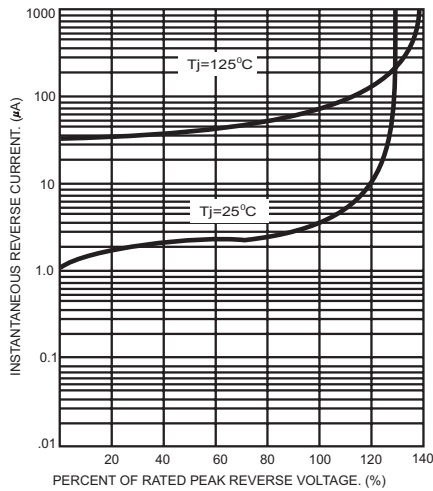


FIG.4- TYPICAL FORWARD CHARACTERISTICS

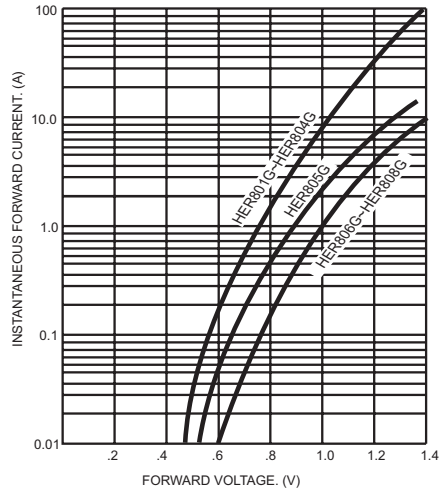


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

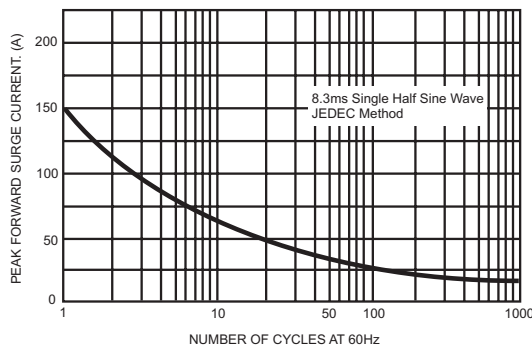


FIG.6- TYPICAL JUNCTION CAPACITANCE

