# HER101G THRU HER108G

## ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

**VOLTAGE：50 TO 1000V** **CURRENT： 1.0A**

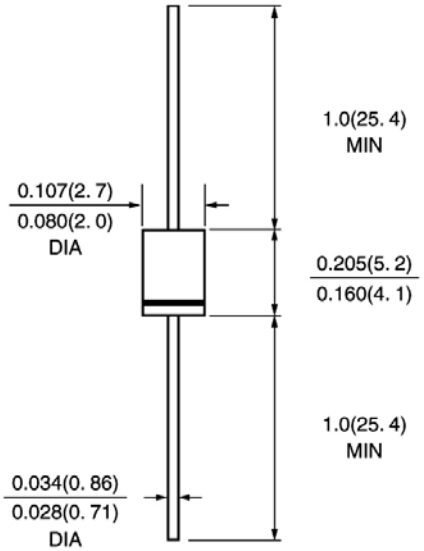
## FEATURE

Low power loss
High surge capability
Glass passivated chip junction
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250℃/10sec/0.375″ lead length at 5 lbs tension

## MECHANICAL DATA

Terminal：Plated axial leads solderable per MIL-STD 202E, method 208C
Case：Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity：color band denotes cathode
Mounting position：any

**DO-41/DO-204AL**




Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25℃, unless otherwise stated)

| | SYMBOL | HER 101G | HER 102G | HER 103G | HER 104G | HER 105G | HER 106G | HER 107G | HER 108G | units |
|---|---|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | Vrrm | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | Vrms | 35 | 70 | 140 | 210 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking Voltage | Vdc | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current 3/8″ lead length at Ta =65℃ | If(av) | 1.0 | | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm | 30 | | | | | | | | A |
| Maximum Forward Voltage at Forward current 1.0A Peak | Vf | 1.0 | | | | 1.3 | 1.7 | | | V |
| Maximum DC Reverse Current Ta =25℃<br>at rated DC blocking voltage Ta =125℃ | Ir | 10.0<br>100.0 | | | | | | | | μA<br>μA |
| Maximum Reverse Recovery Time (Note 1) | Trr | 50 | | | | | 75 | | | nS |
| Typical Junction Capacitance (Note 2) | Cj | 20 | | | | | 15 | | | pF |
| Typical Thermal Resistance (Note 3) | Rth(ja)<br>Rth(jl) | 68<br>18 | | | | | | | | ℃/W |
| Storage and Operating Junction Temperature | Tstg,Tj | -55 to +150 | | | | | | | | ℃ |

Note：
1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8″ lead length, P.C. Board Mounted

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

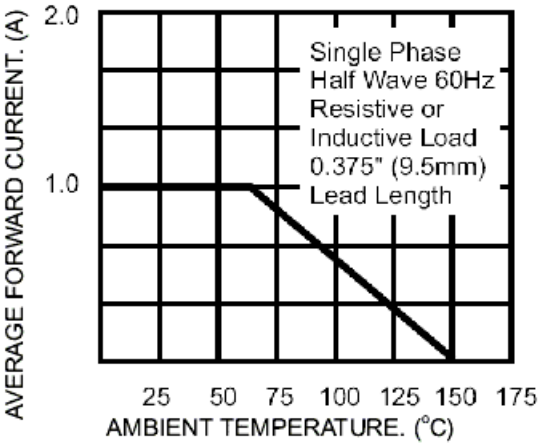



FIG.2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

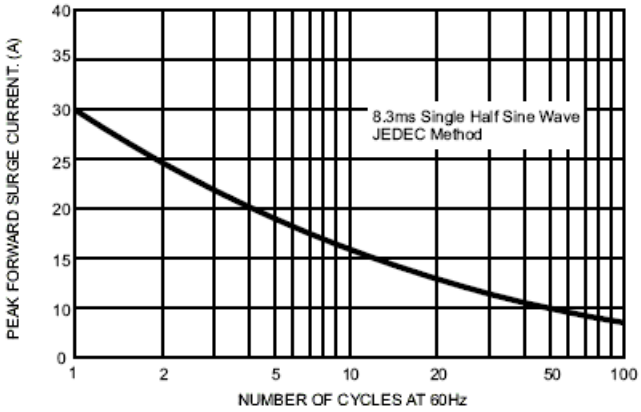



FIG.3- TYPICAL FORWARD CHARACTERISTICS

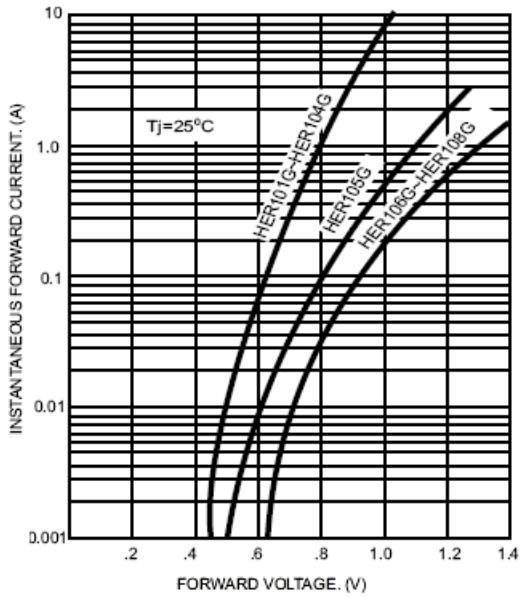
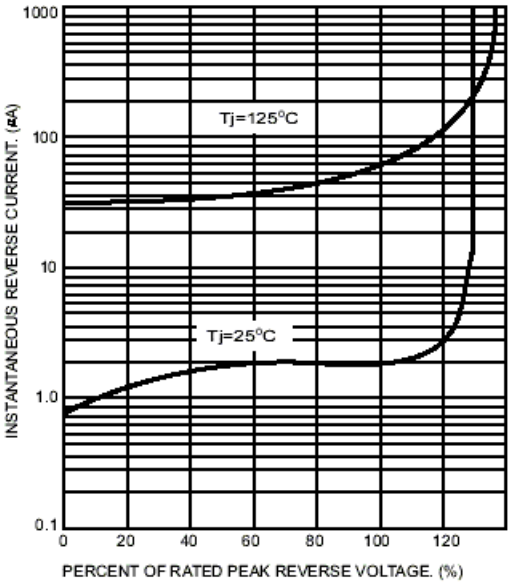



FIG.4- TYPICAL REVERSE CHARACTERISTICS



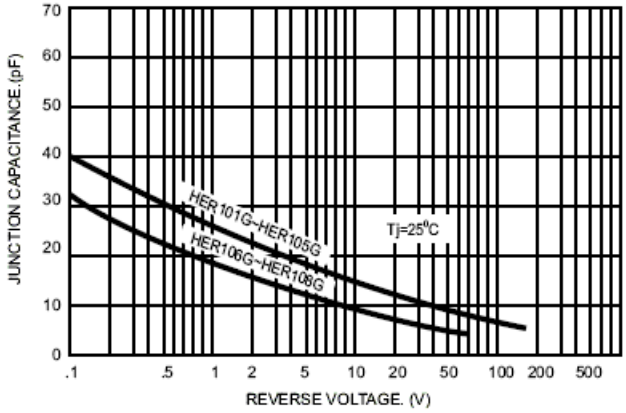


FIG.5- TYPICAL JUNCTION CAPACITANCE