

## FEATURES:

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- High speed switching

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-54151736  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

## MECHANICAL DATA

Case : Molded plastic

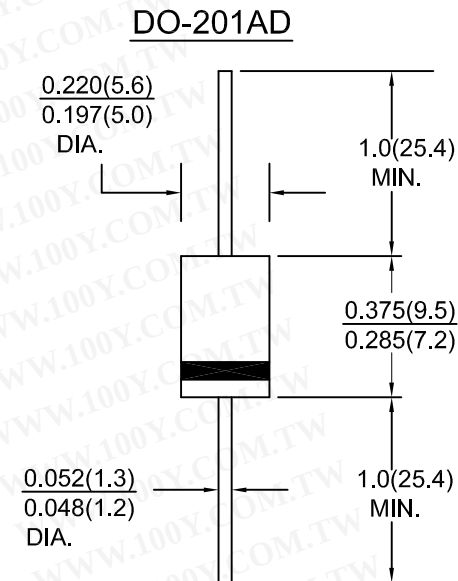
Epoxy: UL 94V-0 rate flame retardant

Lead : Axial leads, solderable per MIL-STD-202,  
 Method 208 guaranteed

Polarity : Color band on body denotes cathode end

Mounting Position : Any

Weight : 1.10 grams



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temp. unless otherwise specified.

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

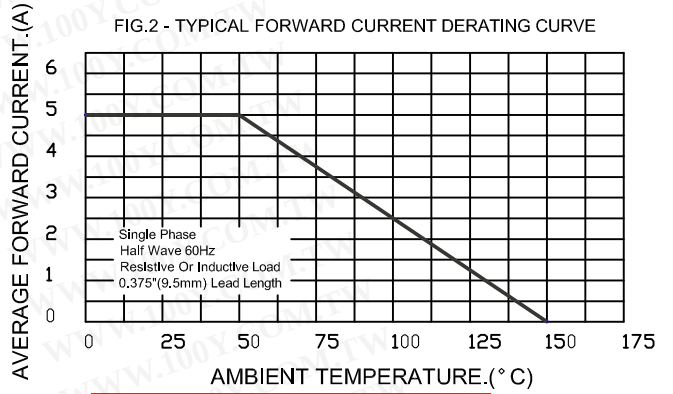
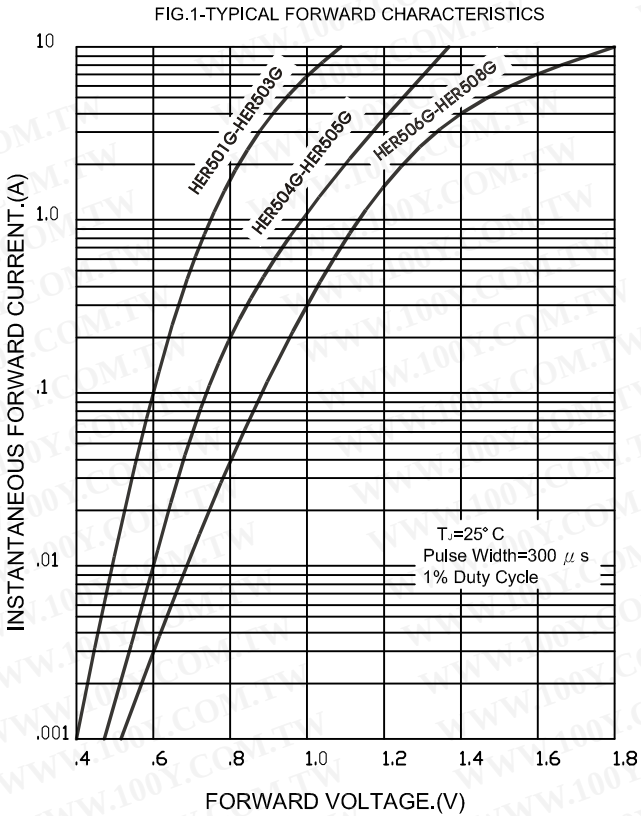
For capacitive load, derate current by 20 %.

| Characteristic                                                                                      | Symbol                           | HER 501G    | HER 502G | HER 503G | HER 504G | HER 505G | HER 506G | HER 507G | HER 508G | Units |
|-----------------------------------------------------------------------------------------------------|----------------------------------|-------------|----------|----------|----------|----------|----------|----------|----------|-------|
| Maximum recurrent peak reverse voltage                                                              | V <sub>RRM</sub>                 | 50          | 100      | 200      | 300      | 400      | 600      | 800      | 1000     | Volts |
| Maximum RMS voltage                                                                                 | V <sub>RMS</sub>                 | 35          | 70       | 140      | 210      | 280      | 420      | 560      | 700      | Volts |
| Maximum DC blocking voltage                                                                         | V <sub>DC</sub>                  | 50          | 100      | 200      | 300      | 400      | 600      | 800      | 1000     | Volts |
| Maximum average forward rectified current<br>.375"(9.5mm) lead length at Ta=50 ° C                  | I <sub>O</sub>                   | 5.0         |          |          |          |          |          |          |          | Amps  |
| Peak forward surge current ,8.3ms single half sine-wave<br>superimposed on rated load(JEDEC Method) | I <sub>FSM</sub>                 | 200         |          |          |          |          |          |          |          | Amps  |
| Maximum instantaneous forward voltage at 5.0 A                                                      | V <sub>F</sub>                   | 1.0         |          |          | 1.30     |          | 1.7      |          |          | Volts |
| Maximum DC reverse current Ta=25 ° C<br>at rated DC blocking voltage Ta=125 ° C                     | I <sub>R</sub>                   | 10.0<br>200 |          |          |          |          |          |          |          | μ A   |
| Maximum reverse recovery time (note 1)                                                              | t <sub>rr</sub>                  | 50          |          |          |          |          | 75       |          |          | nS    |
| Typical junction capacitance (note 2)                                                               | C <sub>j</sub>                   | 75          |          |          |          |          |          |          |          | pF    |
| Operating and storage temperature range                                                             | T <sub>j</sub> ,T <sub>stg</sub> | -65 to +150 |          |          |          |          |          |          |          | ° C   |

Notes : 1. Reverse recovery test condition : I<sub>F</sub>=0.5A ; I<sub>R</sub>=1.0A ; I<sub>RR</sub>=0.25A

2. Measured 1MHz and applied reverse voltage of 4.0V DC

# RATING AND CHARACTERISTIC CURVES HER501G THRU HER508G



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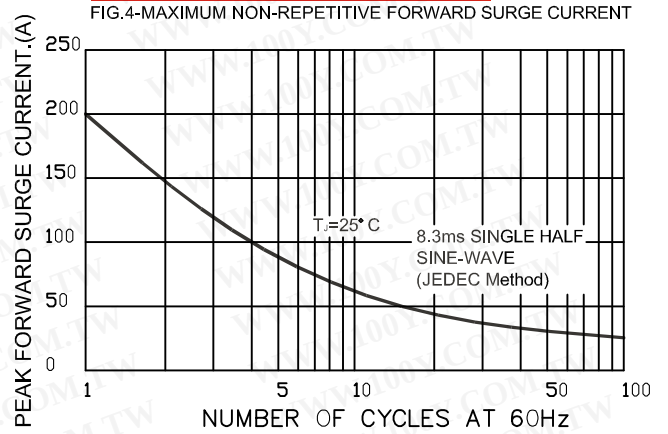
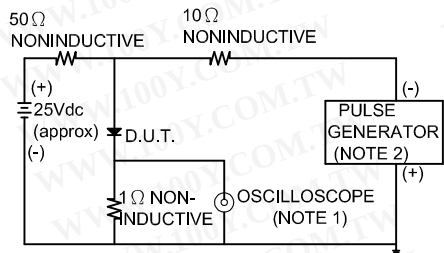


FIG.3-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES:1. Rise Time=7ns max. Input Impedance=1 megohm.22pF  
2. Rise Time=10ns max. Source Impedance=50 ohms

