

## ULTRA FAST GLASS PASSIVATED RECTIFIERS

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)

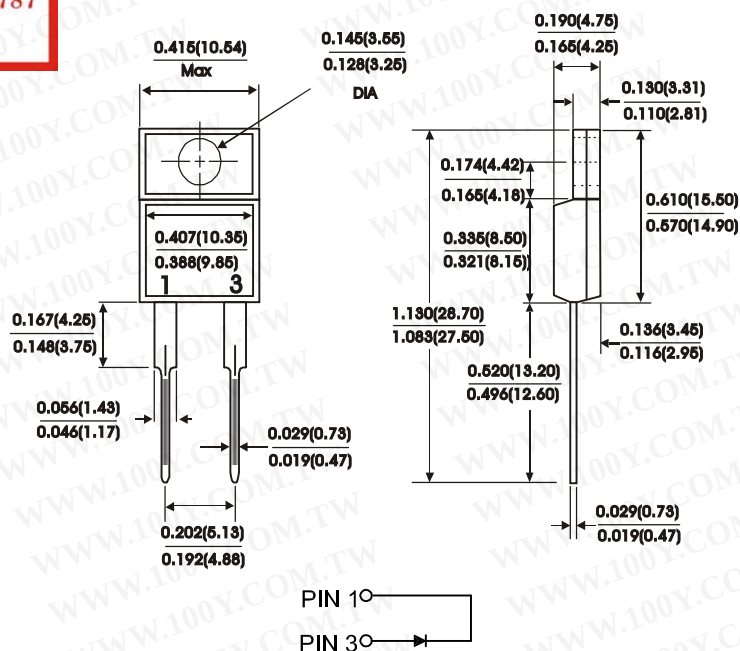
## FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High reliability
- Low forward voltage drop
- High surge current capability
- High temperature soldering guaranteed :  
250°C /10 second,0.25"(6.35mm)from case

## MECHANICAL DATA

Case : JEDEC ITO-220AC molded plastic  
 Terminals : Leads solderable per MIL-STD-750 Method 2026  
 Position : As marked  
 Mounting Position : Any  
 Mounting Torque : 5 in - lbs.max  
 Weight : 0.08 ounce,2.24grams

## ITO-220AC



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%.

| Characteristic                                                                                               | Symbol            | UFF<br>8005   | UFF<br>801 | UFF<br>802 | UFF<br>803 | UFF<br>804 | UFF<br>806 | UFF<br>808 | Units          |
|--------------------------------------------------------------------------------------------------------------|-------------------|---------------|------------|------------|------------|------------|------------|------------|----------------|
| Maximum recurrent peak reverse voltage                                                                       | V <sub>RRM</sub>  | 50            | 100        | 200        | 300        | 400        | 600        | 800        | Volts          |
| Maximum RMS voltage                                                                                          | V <sub>RMS</sub>  | 35            | 70         | 140        | 210        | 280        | 280        | 560        | Volts          |
| Maximum DC blocking voltage                                                                                  | V <sub>DC</sub>   | 50            | 100        | 200        | 300        | 400        | 600        | 800        | Volts          |
| Maximum average forward rectified current<br>at T <sub>c</sub> =100°C                                        | I <sub>(AV)</sub> | 8.0           |            |            |            |            |            |            | Amps           |
| Peak forward surge current 8.3ms single half<br>sine-wave superimposed on rated load<br>(JEDEC Method)       | I <sub>FSM</sub>  | 125           |            |            |            |            |            |            | Amps           |
| Maximum instantaneous forward voltage IF=8.0A                                                                | V <sub>F</sub>    | 1.0           |            |            | 1.30       |            | 1.70       |            | Volts          |
| Maximum DC reverse current<br>at rated DC blocking voltage<br>T <sub>c</sub> =25 °C<br>T <sub>c</sub> =125°C | I <sub>R</sub>    | 10.0<br>500.0 |            |            |            |            |            |            | μA             |
| Typical reverse recovery time(NOTE 1)                                                                        | T <sub>RR</sub>   | 50            |            |            | 75         |            | 100        |            | nS             |
| Typical junction capacition(NOTE 2)                                                                          | C <sub>J</sub>    | 80            |            |            |            |            | 50         |            | P <sub>F</sub> |
| Operating temperature range                                                                                  | T <sub>J</sub>    | -55to+150     |            |            |            |            |            |            | °C             |
| Storage temperature range                                                                                    | T <sub>stg</sub>  | -55to+150     |            |            |            |            |            |            | °C             |

## NOTES:

(1)Reverse Recovery Test CONDITION :  $I_F=0.5A$ ,  $I_R=1.0A$ ,  $I_{RR}=0.25A$

(2)Measured at 1MHZ and reverse Voltage of 4.0V

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

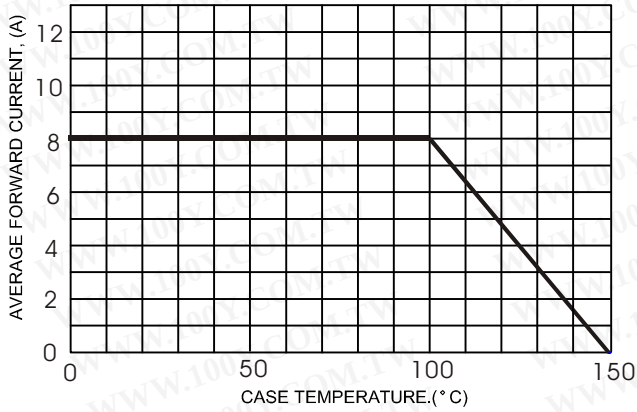


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

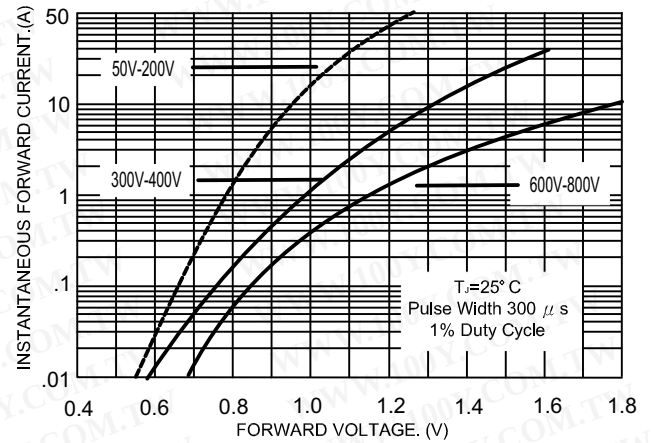


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

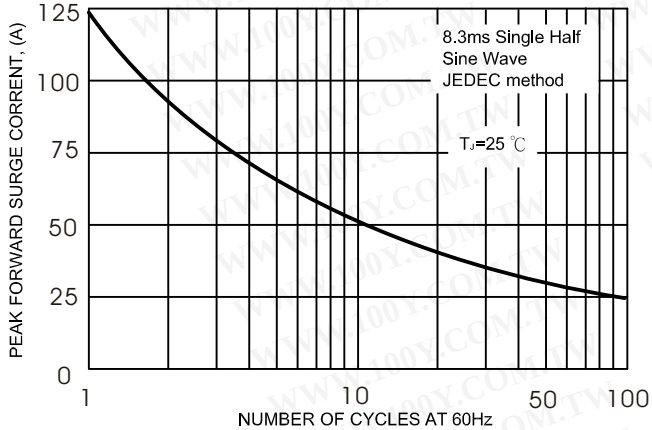


Figure 6 GR1 Test Circuit

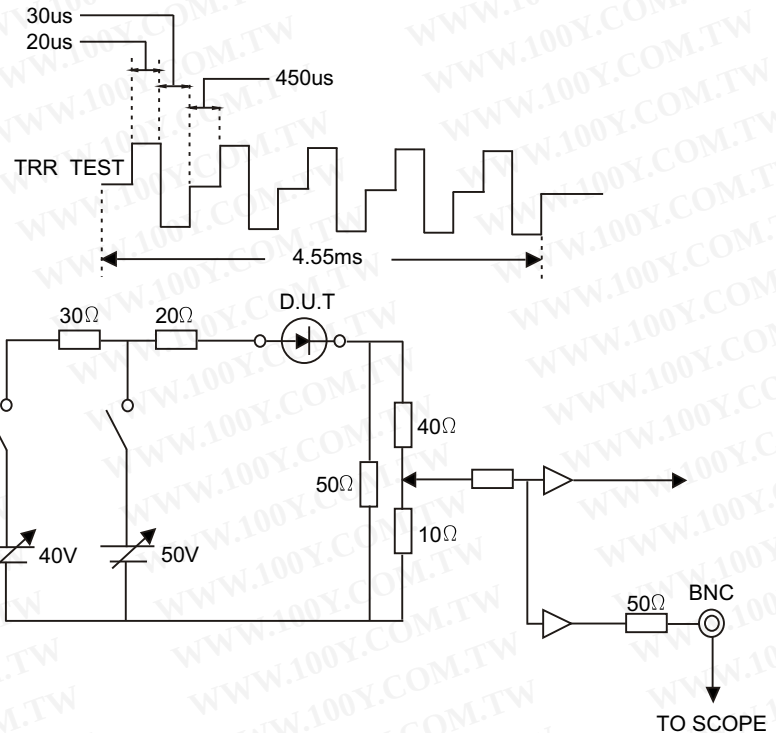


FIG.4- TYPICAL JUNCTION CAPACITANCE

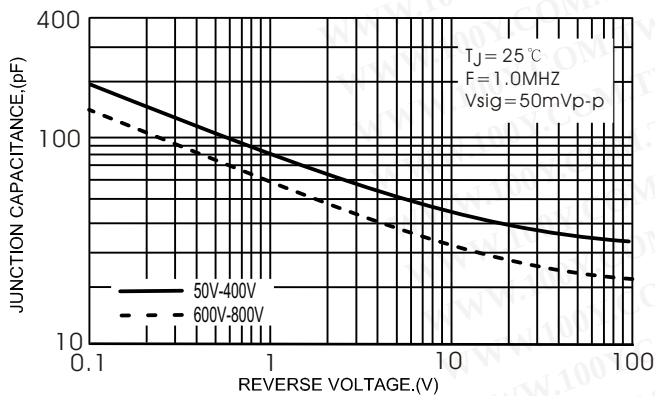
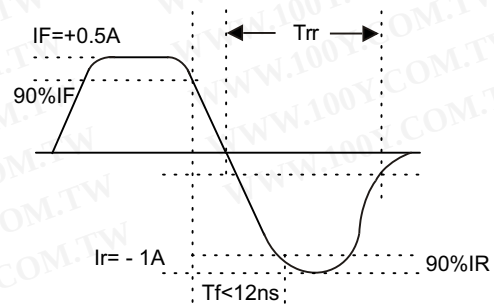
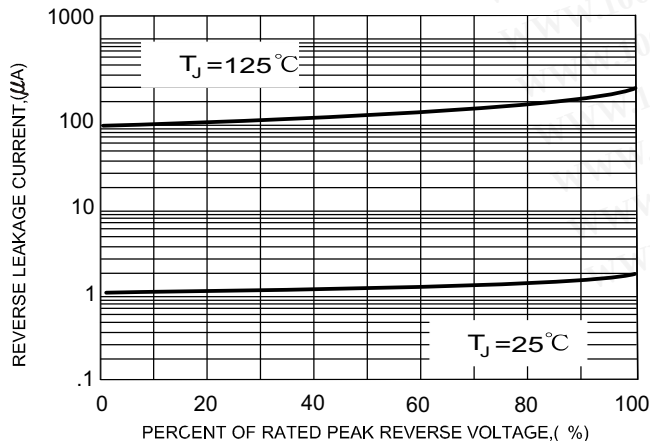


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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