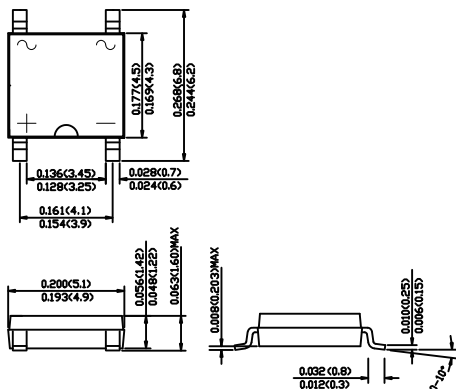




# UABS2 THRU UABS10

GLASS PASSIVATED ULTRA FAST RECOVERY BRIDGE RECTIFIERS  
Voltage Range - 200 to 1000 Volts    Current - 0.8/1.0 Ampere

## ABS



Dimensions in inches and (millimeters)

## FEATURES

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs., (2.3kg) tension
- ◆ Small size, simple installation
- ◆ Leads solderable per MIL-STD-202, Method 208
- ◆ High surge current capability
- ◆ Glass passivated chip junction
- ◆ Green compound(halogen&Sb<sub>2</sub>O<sub>3</sub> free)

## MECHANICAL DATA

**Case:** Molded plastic body

**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026

**Polarity:** Polarity symbols marked on case

**Mounting Position:** Any

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load derate current by 20%.

| TWGMC Catalog Number                                                                                          | SYMBOLS            | UABS2       | UABS4 | UABS6 | UABS8 | UABS10 | UNITS    |
|---------------------------------------------------------------------------------------------------------------|--------------------|-------------|-------|-------|-------|--------|----------|
| Maximum repetitive peak reverse voltage                                                                       | V <sub>RRM</sub>   | 200         | 400   | 600   | 800   | 1000   | V        |
| Maximum RMS voltage                                                                                           | V <sub>RMS</sub>   | 140         | 280   | 420   | 560   | 700    | V        |
| Maximum DC blocking voltage                                                                                   | V <sub>DC</sub>    | 200         | 400   | 600   | 800   | 1000   | V        |
| Maximum average forward rectified current<br>On glass-epoxy P.C.B.(Note1)<br>On aluminum substrate(Note2)     | I <sub>F(AV)</sub> | 0.8<br>1.0  |       |       |       |        | A        |
| Peak forward surge current,<br>8.3ms single half sine-wave superimposed on<br>rated load                      | I <sub>FSM</sub>   | 30          |       |       |       |        | A        |
| Maximum instantaneous forward voltage drop<br>per leg at 0.4A                                                 | V <sub>F</sub>     | 1.0         | 1.4   | 1.7   |       |        | V        |
| Maximum DC reverse current      T <sub>A</sub> =25℃<br>at rated DC blocking voltage      T <sub>A</sub> =125℃ | I <sub>R</sub>     | 5.0<br>500  |       |       |       |        | uA<br>uA |
| Typical thermal resistance(NOTE 3)                                                                            | R(θ) <sub>JL</sub> | 25          |       |       |       |        | ℃/W      |
|                                                                                                               | R(θ) <sub>JA</sub> | 75          |       |       |       |        |          |
| Maximum reverse recovery time      (NOTE 4)                                                                   | t <sub>rr</sub>    | 50          |       | 75    |       |        | ns       |
| Operating temperature range                                                                                   | T <sub>J</sub>     | -55 to +150 |       |       |       |        | ℃        |
| storage temperature range                                                                                     | T <sub>STG</sub>   | -55 to +150 |       |       |       |        | ℃        |

NOTES:1.On glass epoxy P.C.B. mounted on 0.05x0.05"(1.3x1.3mm) pads.

2.On aluminum substrate P.C.B. with an area of 0.8"x0.8"(20x20mm) mounted on 0.05X0.05"(1.3X1.3mm) solder pad.

3.Thermal resistance form junction to ambient and junction to lead mounted on P.C.B. with 0.2X0.2"(5X5mm) copper pads.

4.Reverse recovery condition  $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$ .

## RATINGS AND CHARACTERISTIC CURVES UABS2 THRU UABS10

FIG.1 FORWARD DERATING CURVE

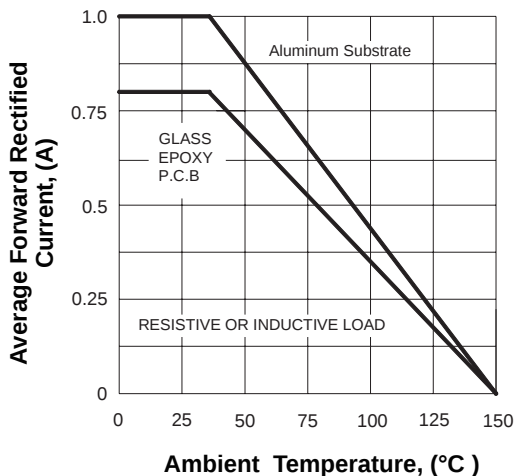


FIG.2 PEAK FORWARD SURGE CURRENT

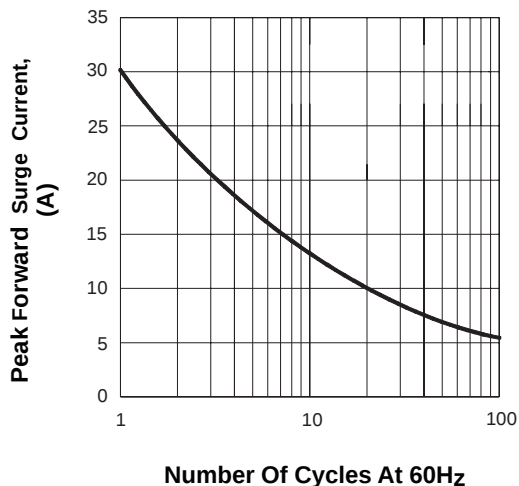


FIG.3 TYPICAL FORWARD CHARACTERISTICS

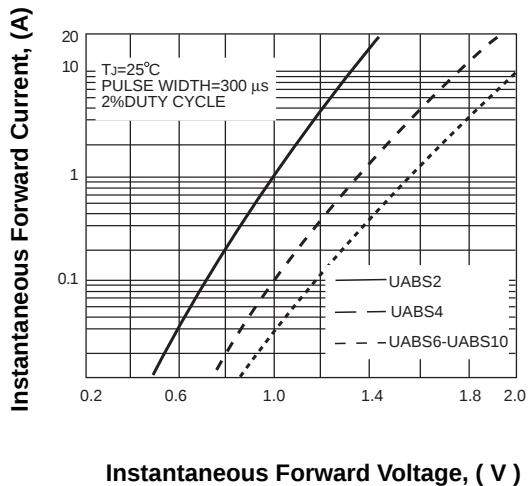
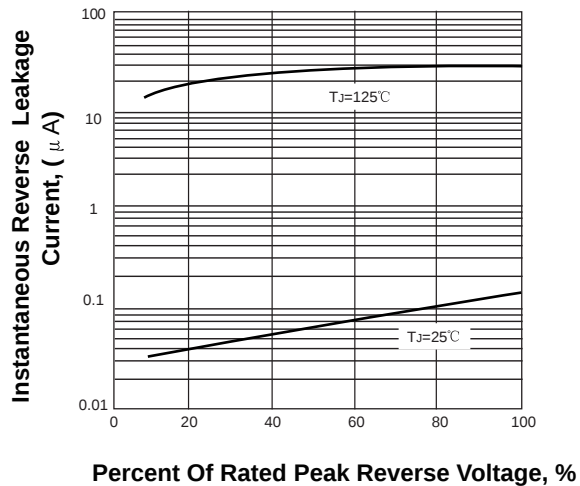


FIG.4 TYPICAL REVERSE CHARACTERISTICS



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!