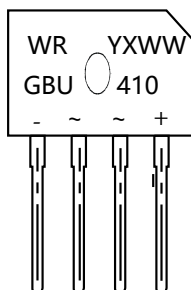


## Ultrasoft Recovery Bridge



### PINNING

| PIN | DESCRIPTION        |
|-----|--------------------|
| 1   | Input Pin (~)      |
| 2   | Input Pin (~)      |
| 3   | Output Anode (+)   |
| 4   | Output Cathode (-) |

### Features

- Glass Passivated Chip Junction
- Reverse Voltage - 1000 V
- Forward Current - 4A
- High Surge Current Capability
- Designed For Surface Mount Application

### Benefits

- Case: GBU
- Terminals: Solderable Per MIL-STD-750

### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

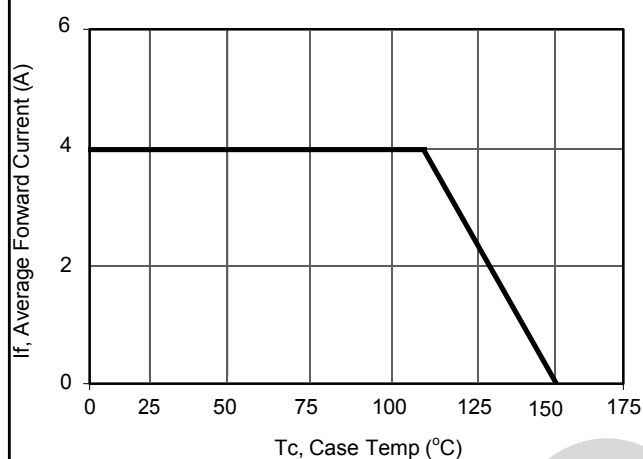
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

| Parameter                                                                                               | Symbols                           | WRGBU410   | Units            |
|---------------------------------------------------------------------------------------------------------|-----------------------------------|------------|------------------|
| Maximum Repetitive Peak Reverse Voltage                                                                 | VRRM                              | 1000       | V                |
| Maximum RMS voltage                                                                                     | VRMS                              | 700        | V                |
| Maximum DC Blocking Voltage                                                                             | VDC                               | 1000       | V                |
| Average Rectified Output Current                                                                        | I <sub>o</sub>                    | 4.0        | A                |
| Reverse Recovery Time.<br>IF=0.5A,IR=1A,IRR=0.25A                                                       | T <sub>rr</sub>                   | 10         | us               |
| Peak Forward Surge Current 8.3 ms Single<br>Half Sine Wave Superimposed on Rated<br>Load (JEDEC Method) | I <sub>FSM</sub>                  | 110        | A                |
| I <sup>2</sup> t rating for fusing ( 1ms< t < 10ms)                                                     | I <sup>2</sup> t                  | 60.5       | A <sup>2</sup> S |
| Maximum Forward Voltage at 2.0 A                                                                        | V <sub>F</sub>                    | 1.0        | V                |
| Maximum DC Reverse Current @TA=25 °C<br>at Rated DC Blocking Voltage @TA=125 °C                         | I <sub>R</sub>                    | 5<br>100   | μA               |
| Typical Junction Capacitance (Note1)                                                                    | C <sub>j</sub>                    | 50         | pF               |
| Typical Thermal Resistance Junction to Ambient(Note 2)                                                  | R <sub>θJA</sub>                  | 26         | °C/W             |
| Typical Thermal Resistance Junction to Case(Note 2)                                                     | R <sub>θJC</sub>                  | 5.5        | °C/W             |
| Operating and Storage Temperature Range                                                                 | T <sub>j</sub> , T <sub>stg</sub> | -55 ~ +150 | °C               |

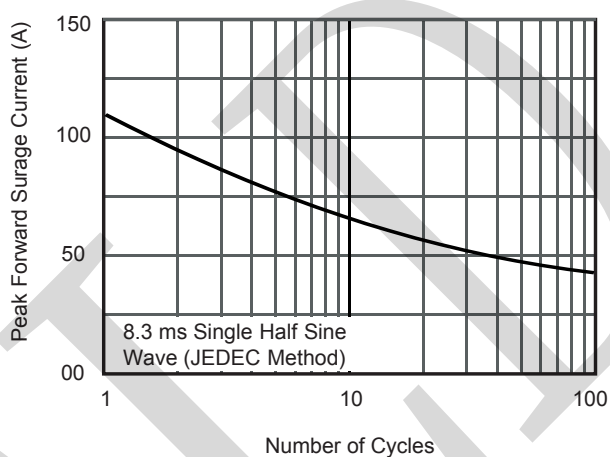
Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

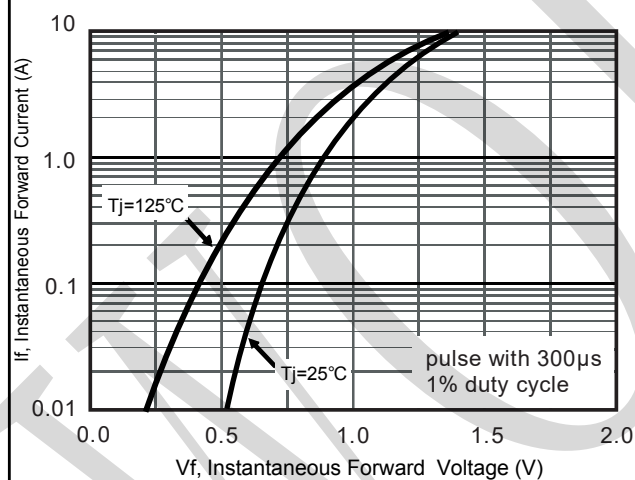
## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



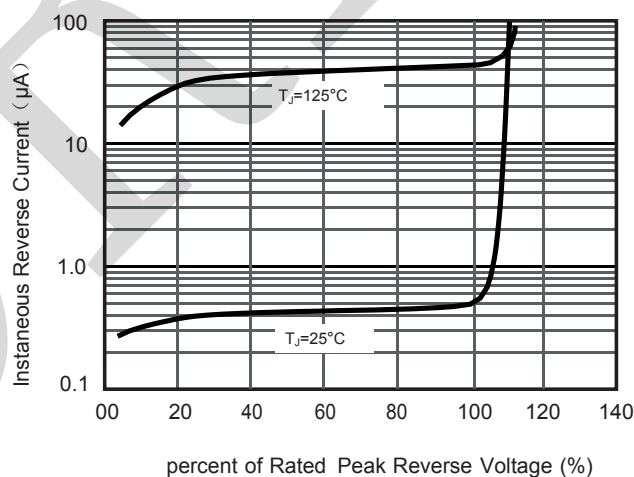
Current Derating, Case



Maximum Non-Repetitive Peak Forward Surge Current

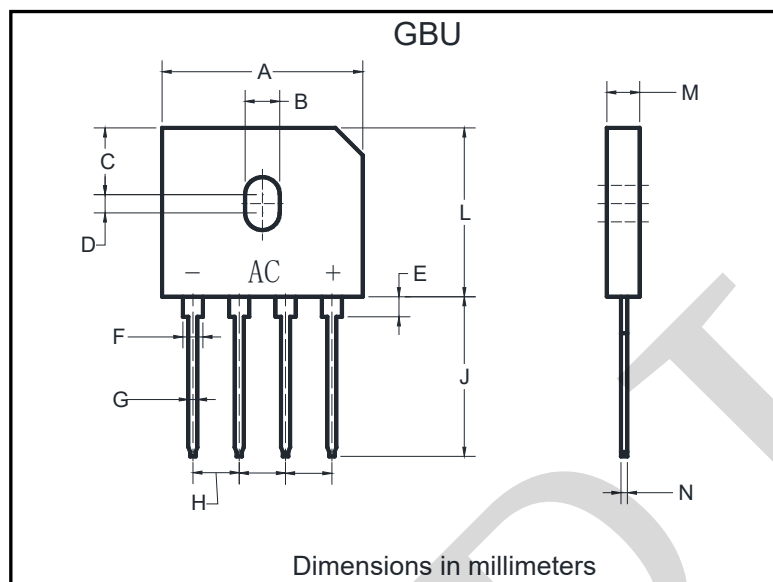


Typical Forward Voltage

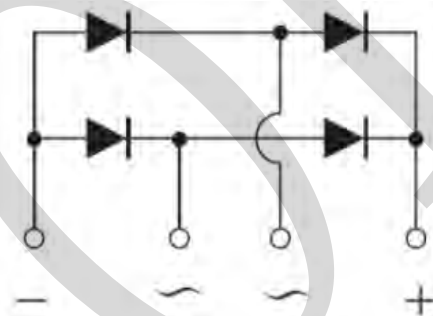


Typical Reverse Characteristics

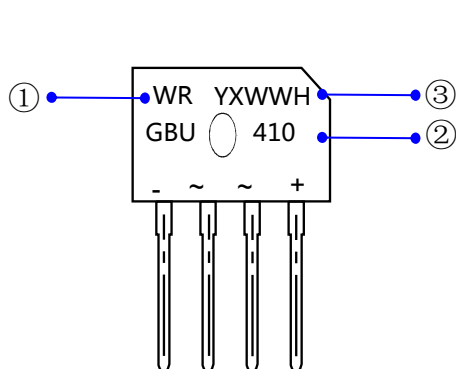
## PACKAGE OUTLINE DIMENSIONS



| GBU |       |       |
|-----|-------|-------|
| Dim | Min   | Max   |
| A   | 21.80 | 22.30 |
| B   | 3.50  | 4.10  |
| C   | 7.40  | 7.90  |
| D   | 1.65  | 2.16  |
| E   | 2.25  | 2.75  |
| F   | 2.05  | 2.3   |
| G   | 1.02  | 1.27  |
| H   | 4.83  | 5.33  |
| J   | 17.0  | 18.5  |
| L   | 18.3  | 18.8  |
| M   | 3.30  | 3.56  |
| N   | 0.46  | 0.56  |



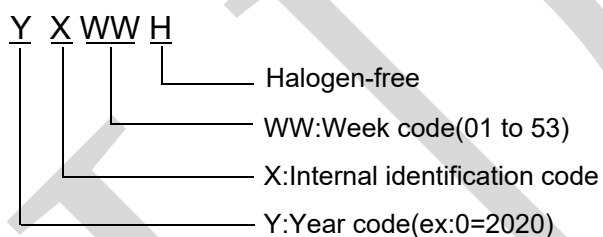
## Marking Information



①WR : Soft bridge special code

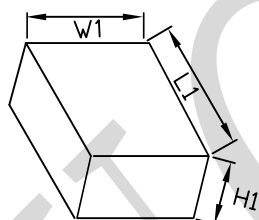
②Product model : GBU410

③PDC information :

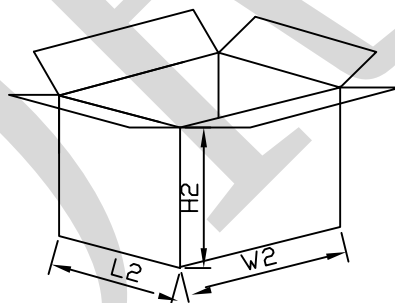


## Packaging Information

### 1.Inside Box



### 2.Outside Box



## Packaging Information

| NO   | UNIT      | Inside Box                                 |     |    | Outside Box                      |     |     |
|------|-----------|--------------------------------------------|-----|----|----------------------------------|-----|-----|
|      |           | L1                                         | W1  | H1 | L2                               | W2  | H2  |
| Size | mm        | 228                                        | 110 | 43 | 460                              | 240 | 235 |
| QTY  | PCS       | 250PCS/carton                              |     |    | 5,000PCS/carton,20boxes in total |     |     |
| Note | Tolerance | ≤20mm,±3mm; 21-100mm,±5mm; 101-500mm,±10mm |     |    |                                  |     |     |