# KBU4005G THRU KBU410G

## Glass Passivated Bridge Rectifiers

**Reverse Voltage - 50 to 1000 Volts**
**Forward Current - 4.0 Amperes**

### Features

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability
- Meet UL flammability classification 94V-0

### Mechanical Data

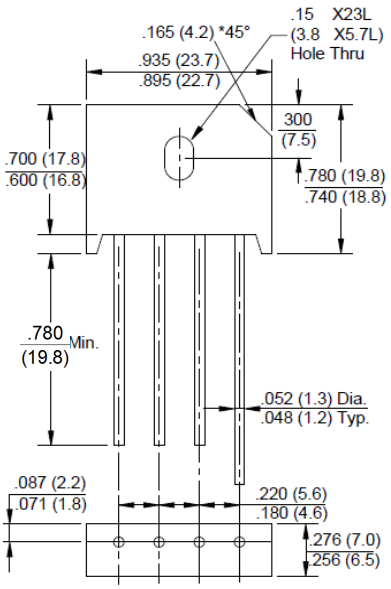
- Polarity: Symbol marked on body
- Mounting position: Any

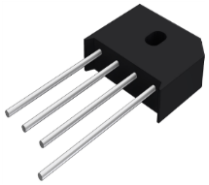
Note: Products with logo HY or hy are made by HY Electronic (Cayman) Limited.

### Applications

- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

### KBU



Package Outline Dimensions in Inches (Millimeters)

RoHS COMPLIANT

## Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| Characteristics | Symbol | KBU 4005G | KBU 401G | KBU 402G | KBU 404G | KBU 406G | KBU 408G | KBU 410G | Unit |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Repetitive Peak Reverse Voltage | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @$T_C$=100 ℃ | $I_{(AV)}$ | 4.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) | $I_{FSM}$ | 125 | | | | | | | A |
| $I^2t$ Rating for Fusing (t<8.3mS) | $I^2t$ | 64.8 | | | | | | | $A^2s$ |
| Peak Forward Voltage per Diode at 4.0A DC | $V_F$ | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated @$T_J$=25℃<br>DC Blocking Voltage per Diode @$T_J$=100℃ | $I_R$ | 10<br>100 | | | | | | | μA |
| Typical Junction Capacitance per Diode (Note1) | $C_J$ | 110 | | | | | | | pF |
| Operating Junction Temperature Range | $T_J$ | -55 to +150 | | | | | | | ℃ |
| Storage Temperature Range | $T_{STG}$ | -55 to +150 | | | | | | | ℃ |

Notes: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2. The typical data above is for reference only

Fig. 1 - Forward Current Derating Curve

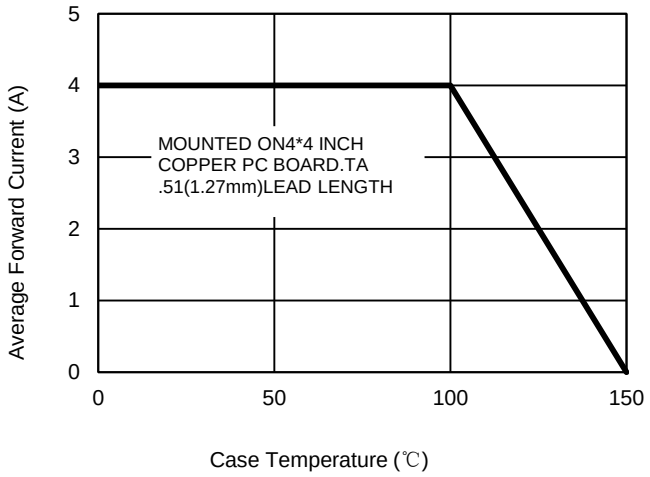



Fig. 2 - Maximum Non-Repetitive Surge Current

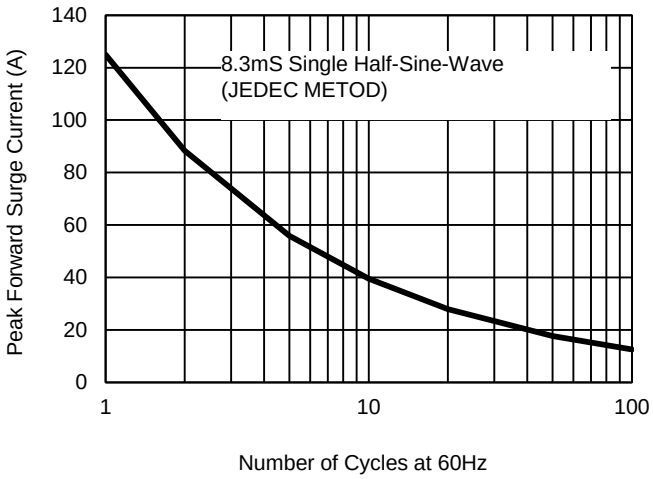



Fig. 3 - Typical Reverse Characteristics

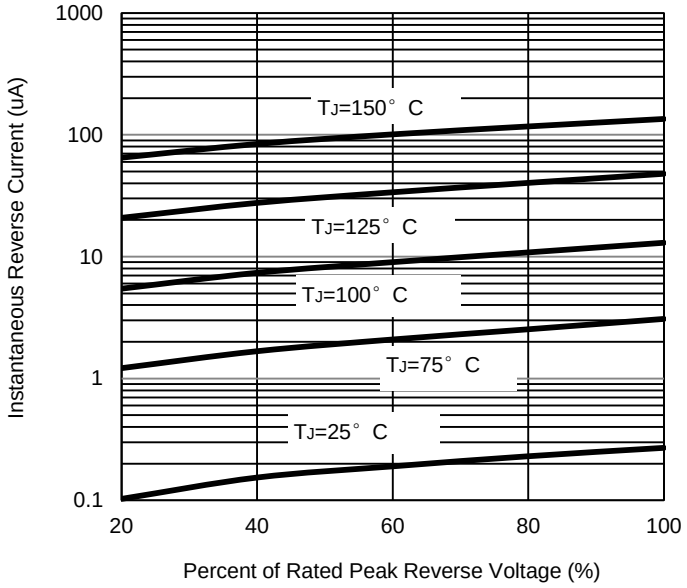



Fig. 4 - Typical Forward Characteristics

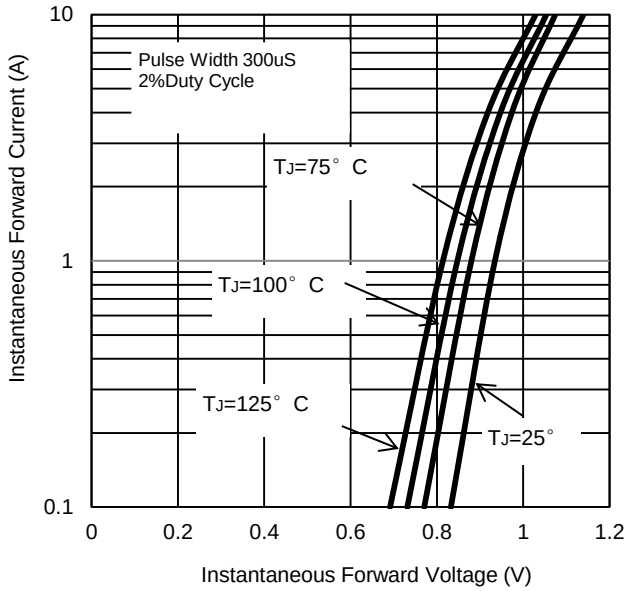
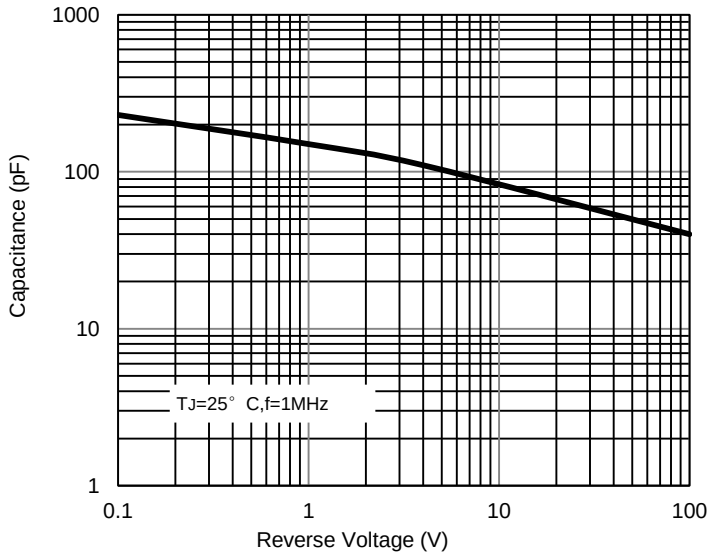



Fig. 5 - Typical Junction Capacitance




The curve above is for reference only.

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