

# 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

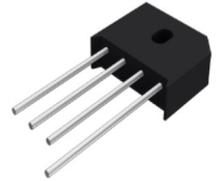
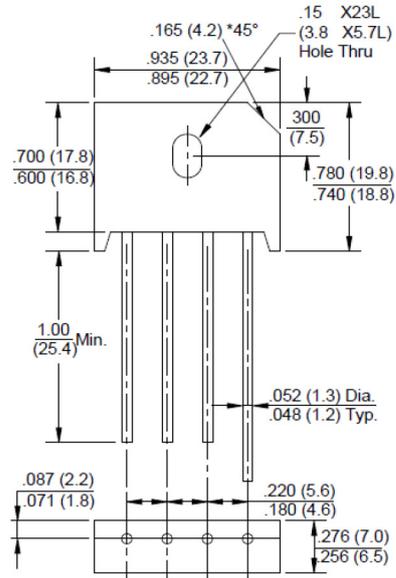
### Mechanical Data

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

### Applications

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

### KBU



RoHS  
COMPLIANT

Package Outline Dimensions in Inches (Millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

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

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

2. The typical data above is for reference only

# Rating and Characteristic Curves

## KBU4005G THRU KBU410G

Fig. 1 - Forward Current Derating Curve

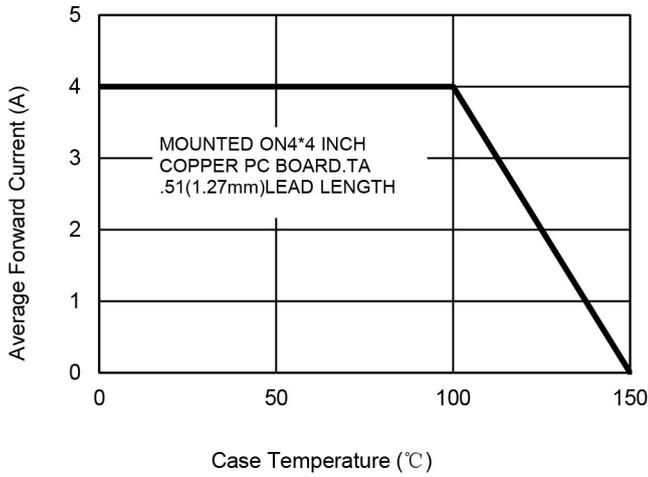


Fig. 2 - Maximum Non-Repetitive Surge Current

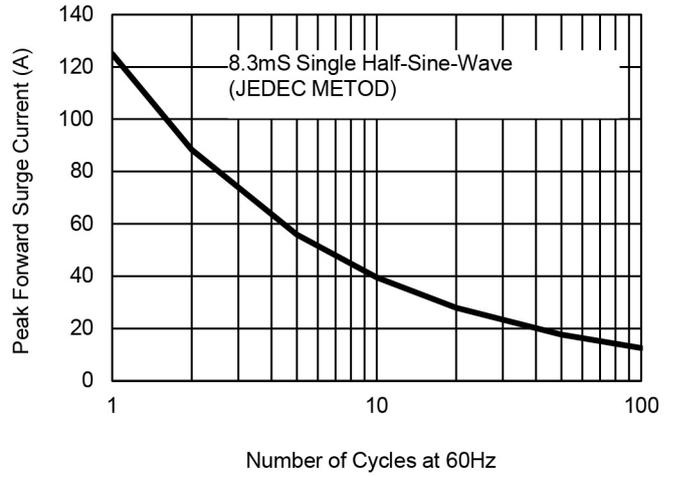


Fig. 3 - Typical Reverse Characteristics

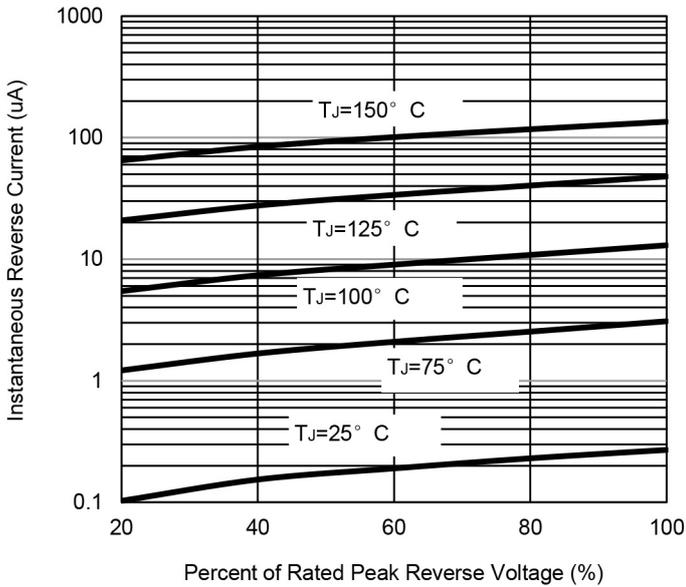


Fig. 4 - Typical Forward Characteristics

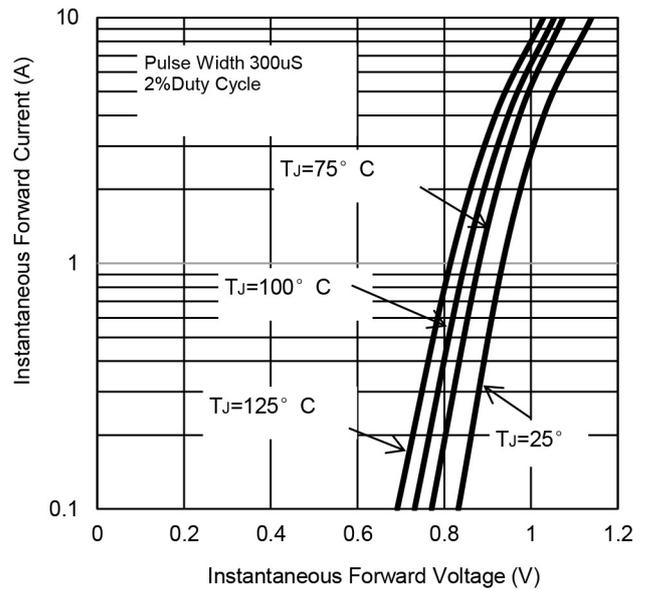
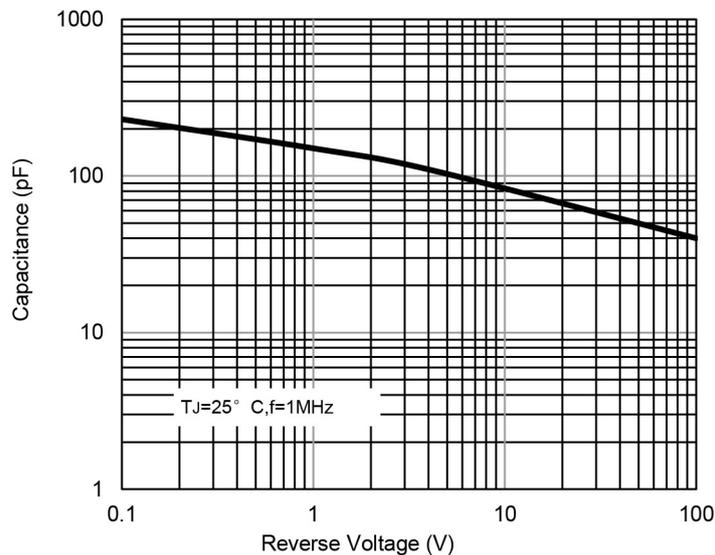


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.