# **KBU10005G THRU KBU1010G**

## **Glass Passivated Bridge Rectifiers**

# Reverse Voltage - 50 to 1000 Volts **Forward Current - 10 Amperes**

#### **Features**

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability

#### **Mechanical Data**

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

Note: Products with logo or by



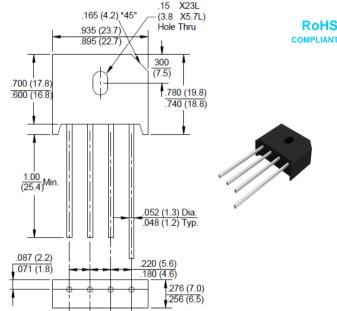
are made by HY Electronic (Cayman) Limited.

#### **Applications**

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

### **KBU**





Package Outline Dimensions in Inches (Millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

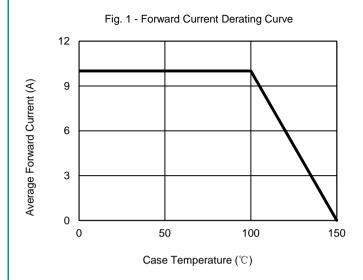
Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	KBU	KBU	KBU	KBU	KBU	KBU	KBU	Unit
	Syllibol	10005G	1001G	1002G	1004G	1006G	1008G	1010G	
Maximum Repetitive Peak Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward nt (with heatsink Note 1)	leavo	10.0							Α
Rectified Curre @ Tc=100℃ (without heatsink)	I(AV)	3.0							
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave,	IFSM	200							А
Superimposed on Rated Load (JEDEC Method)	IFSM								
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	l <sup>2</sup> t	166							A <sup>2</sup> s
Peak Forward Voltage per Diode at 5.0A DC	VF	1.1							V
Maximum DC Reverse Current at Rated @TJ=25℃	lr	10							μА
DC Blocking Voltage per Diode @Tj=125 $^{\circ}$ C	IK	500							
Operating Junction Temperature Range	TJ	-55 to +150							$^{\circ}$
Storage Temperature Range	Тsтg	-55 to +150							$^{\circ}$
	_								

# Rating and Characteristic Curves KBU10005G THRU KBU1010G





250

8.3mS Single Half-Sine-Wave
(JEDEC METOD) 8

150

50

1 100

Number of Cycles at 60Hz

Fig. 2 - Maximum Non-Repetitive Surge Current

Fig. 3 - Typical Reverse Characteristics

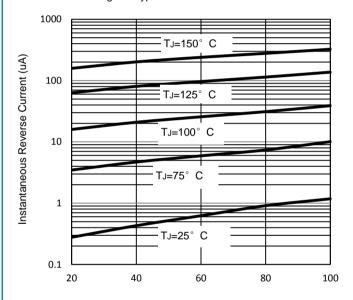


Fig. 4 - Typical Forward Characteristics

10

Pulse Width 300uS
2%Duty Cycle

TJ=100° C

TJ=25° C

TJ=75° C

0.1

0 0.2 0.4 0.6 0.8 1 1.2

Percent of Rated Peak Reverse Voltage (%)



#### **Disclaimer**

ALL specifications and data are subject to be changed without notice to improve reliability function or design or other reasons.

HY makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the cotinuing production of any product. To the maximum extent permitted by applicable law, HY disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on HY's knowledge of typical requirements that are often placed on HY products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify HY's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, HY products are not designed for use in medical, life-saving, or life-sustaining applications or for any other applications in which the failure of the HY product could result in personal injury or death. Customers using or selling HY products not expressly indicated for use in such applications do so at their own risk. Please contact authorized HY personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of HY. Product names and markings noted herein may be trademarks of their respective owners.