

# **Bridge Rectifiers**

#### Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

## **Typical Applications**

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

#### **Mechanical Data**

- Package: KBU
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: As marked on body

## ■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	KBU10005	KBU1001	KBU1002	KBU1004	KBU1006	KBU1008	KBU1010	
Device marking code				KBU10005	KBU1001	KBU1002	KBU1004	KBU1006	KBU1008	KBU1010	
Maximum Repetitive Peak Re	verse Voltage	VRRM	V	50	100	200	400	600	800	1000	
Maximum RMS Voltage		VRMS	V	35	70	140	280	420	560	700	
Maximum DC blocking Voltage		VDC	V	50	100	200	400	600	800	1000	
Average Rectified Output	With heatsink Tc =115℃		A	10.0							
Current @60Hz sine wave, R-load	Without heatsink Ta =25℃	- IO		3.0							
Forward Surge Current (Non-repetitive) @8.3ms, Half-sine wave,1 cycle, Tj=25°C		15014	A	170							
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		IFSM		340							
Current Squared Time @1ms≤t≤8.3ms Tj=25°C,Rating of per diode		l²t	A <sup>2</sup> S	120							
Mounting torque @Recommend torque: 5kg·cm		Tor	kg∙cm	8							
Storage temperature		T <sub>stg</sub>	°C	-55 ~ +150							
Junction temperature		Tj	°C	-55 ~ +150							

## ■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBU10005	KBU1001	KBU1002	KBU1004	KBU1006	KBU1008	KBU1010
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=5.0A	1.0						
Maximum DC reverse current at rated DC blocking voltage per			Tj =25℃	5						
rated DC blocking voltage per diode	чĸ	μA	Tj =125℃	100						
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	e 50						

# **Thermal Characteristics** $(T_a=25^{\circ}C \text{ Unless otherwise specified})$

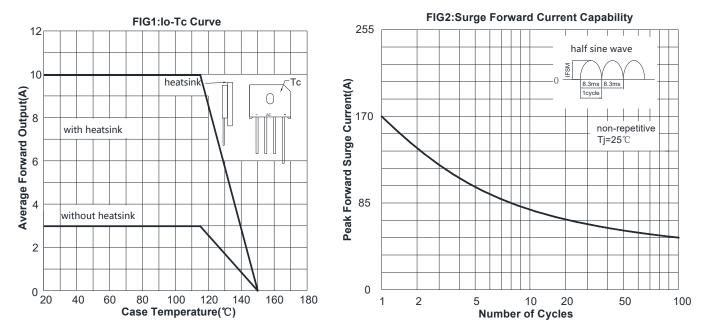
PARAMETER		SYMBOL	UNIT	KBU10005	KBU1001	KBU1002	KBU1004	KBU1006	KBU1008	KBU1010
Typical	Between junction and ambient, Without heatsink	Røj-a	°C/W				25.0	25.0		
Thermal Resistance Between junction and case, With heatsink		Røj-C	C/vv	1.8						

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

## ■Ordering Information (Example)

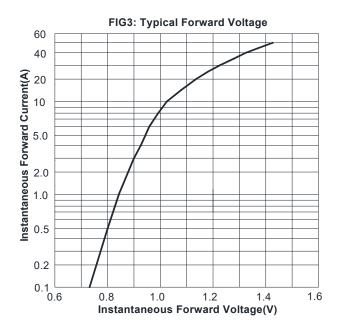
PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
KBU10005 ~ KBU1010	A1	Approximate 7.2	400	400	2400	Paper Box

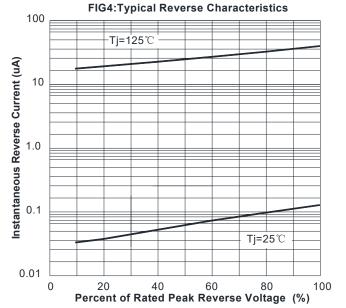
## Characteristics(Typical)



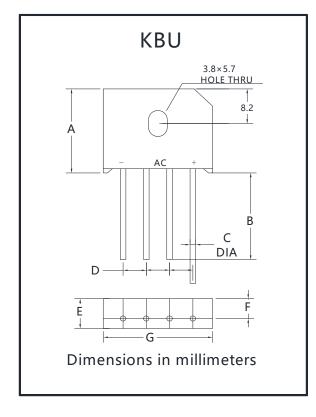
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# Outline Dimensions



	KBU						
Dim	Min	Max					
Α	18.8	19.8					
В	20.0	/					
С	1.2	1.3					
D	4.6	5.6					
E	6.8	7.1					
F	4.6	5.0					
G	22.7	23.7					

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