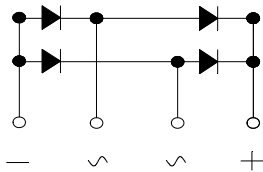
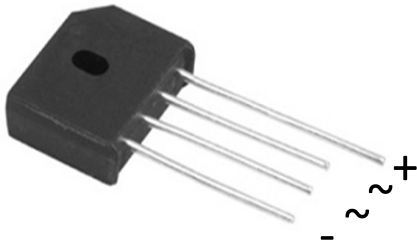


## Bridge Rectifiers



### Features

- UL recognition, file #E230084
- 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	KBU8005	KBU801	KBU802	KBU804	KBU806	KBU808	KBU810
Device marking code			KBU8005	KBU801	KBU802	KBU804	KBU806	KBU808	KBU810
Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load	IO	A	With heatsink Tc =115°C						
			8						
			Without heatsink Ta =25°C						
			2.8						
Surge(Non-repetitive)Forward Current @60Hz half-sine wave, 1 cycle, Ta=25°C	IFSM	A	150						
Current Squared Time @1ms≤t≤8.3ms Tj=25°C,Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> S	93						
Storage Temperature	Tstg	°C	-55 ~+150						
Junction Temperature	Tj	°C	-55 ~+150						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBU8005	KBU801	KBU802	KBU804	KBU806	KBU808	KBU810
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=4A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	μA	VRM=VRRM	10						



# KBU8005 THRU KBU810

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

PARAMETER		SYMBOL	UNIT	KBU8005	KBU801	KBU802	KBU804	KBU806	KBU808	KBU810
Thermal Resistance	Between junction and ambient, Without heatsink	R $\theta$ J-A	°C/W	28 <sup>(1)</sup>						
	Between junction and case, With heatsink	R $\theta$ J-C		4.8 <sup>(2)</sup>						

- Notes
- (1) Thermal resistance from junction to ambient with units mounted in free air ,no heat sink,P.C.B. at 0.375" (9.5mm) lead length with 0.5×0.5"(12×12mm) copper pads.
  - (2) Thermal resistance from junction to case with units mounted on an aluminum plate heat sink.

## ■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
KBU8005~KBU810	A1	Approximate 7.2	400	400	2400	Paper Box

## ■ Characteristics(Typical)

FIG1:I<sub>o</sub>-T<sub>c</sub> Curve

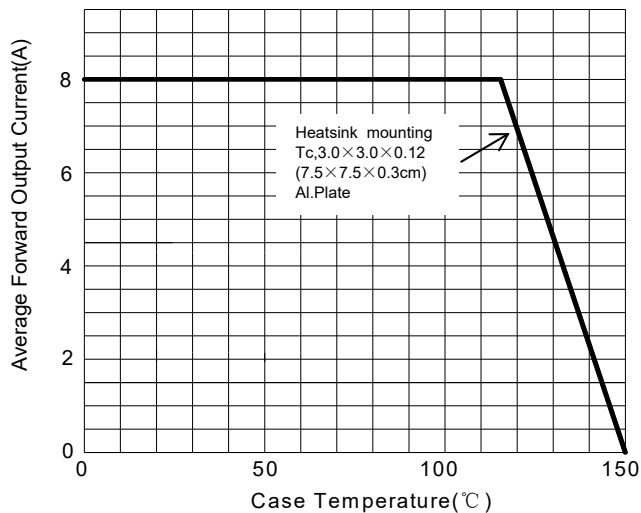


FIG2:Surge Forward Current Capability

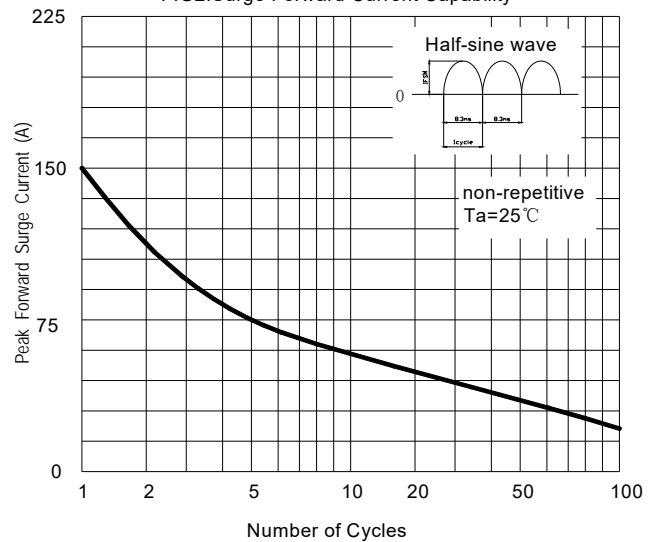


FIG3:Instantaneous Forward Voltage

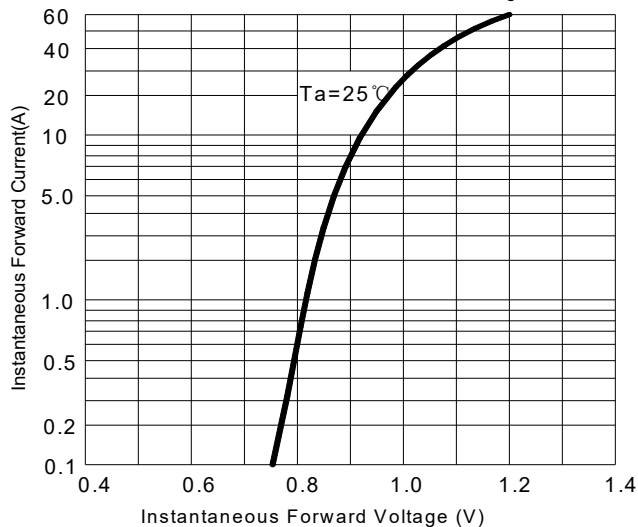
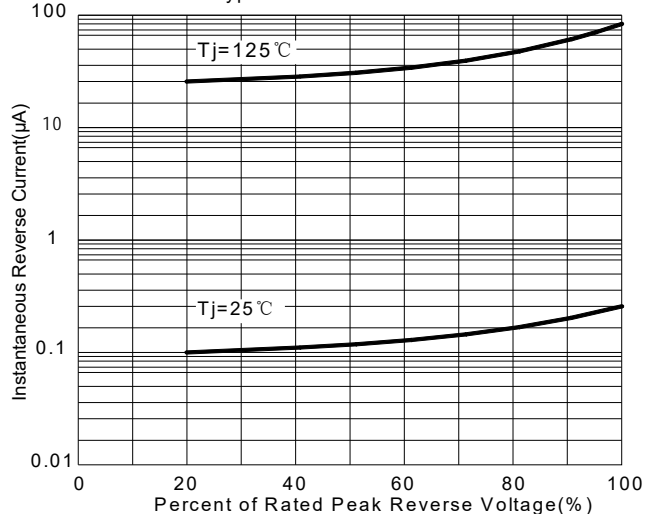


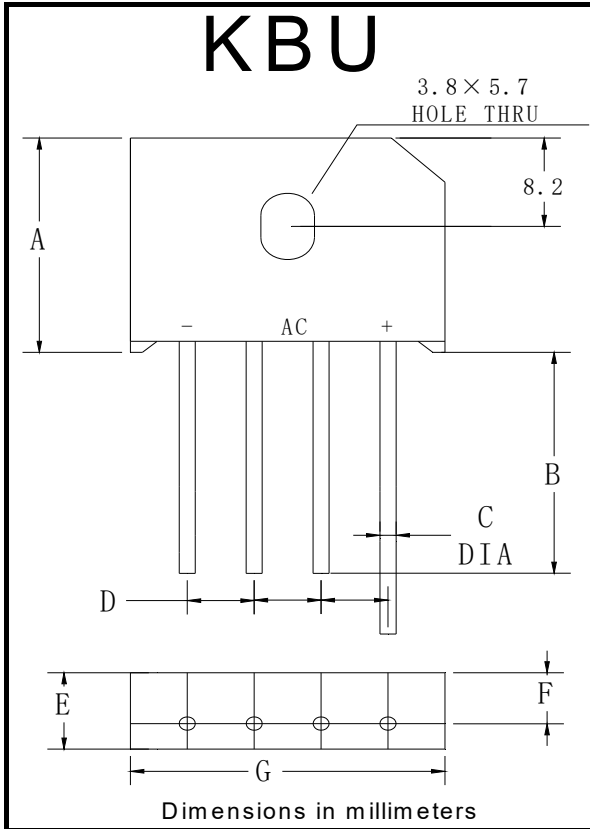
FIG4:Typical Reverse Characteristics





# KBU8005 THRU KBU810

## ■ Outline Dimensions



KBU		
Dim	Min	Max
A	18.8	19.8
B	20.0	/
C	1.2	1.3
D	4.6	5.6
E	6.8	7.1
F	4.6	5.0
G	22.7	23.7



## KBU8005 THRU KBU810

---

### Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.