

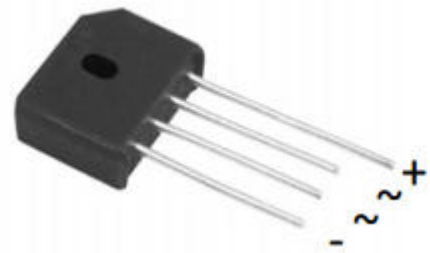
## Bridge Rectifiers

### 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

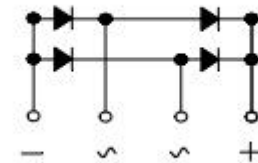
### Typical Applications

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 (T<sub>a</sub>=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
Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, T <sub>c</sub> =115°C	I <sub>O</sub>	A	10						
Surge(Non-repetitive)Forward Current @60Hz half-sine wave, 1 cycle, T <sub>a</sub> =25°C	I <sub>FSM</sub>	A	170						
Current Squared Time @1ms≤t≤8.3ms, T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> S	120						
Storage Temperature	T <sub>stg</sub>	°C	-55 ~+150						
Junction Temperature	T <sub>j</sub>	°C	-55 ~+150						

### ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBU10005	KBU1001	KBU1002	KBU1004	KBU1006	KBU1008	KBU1010
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =5A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	V <sub>RM</sub> =V <sub>RRM</sub>	10						

### ■ Thermal Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	KBU10005	KBU1001	KBU1002	KBU1004	KBU1006	KBU1008	KBU1010
Thermal Resistance Between junction and ambient,	R <sub>θJ-C</sub>	°C/W	4.7 <sup>(1)</sup>						

#### Notes

(1) Units Mounted on an aluminum plate heat sink.

■ **Ordering Information (Example)**

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM 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)**

FIG1:Io-Tc Curve

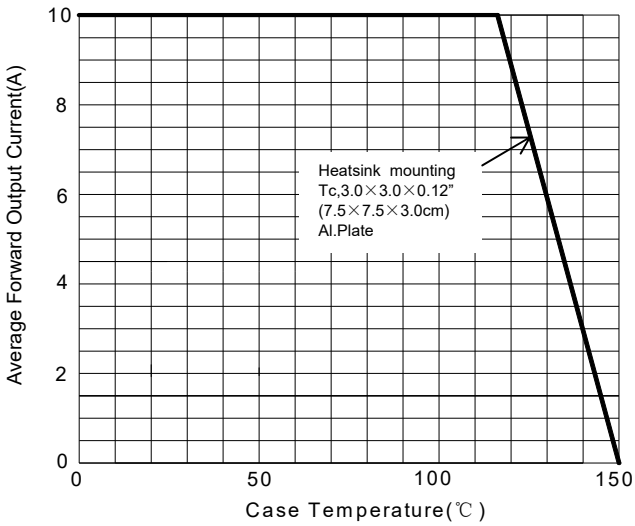


FIG2: Surge Forward Current Capability

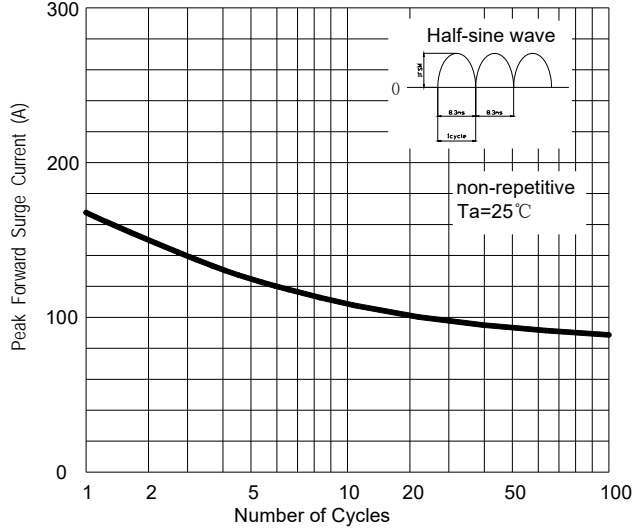


FIG3: Instantaneous Forward Voltage

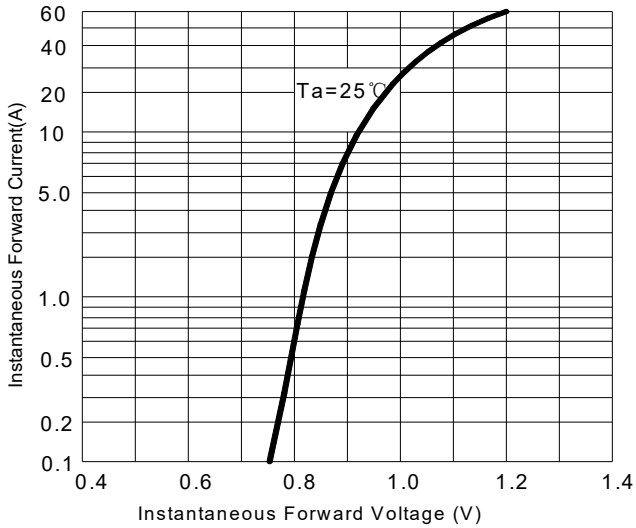
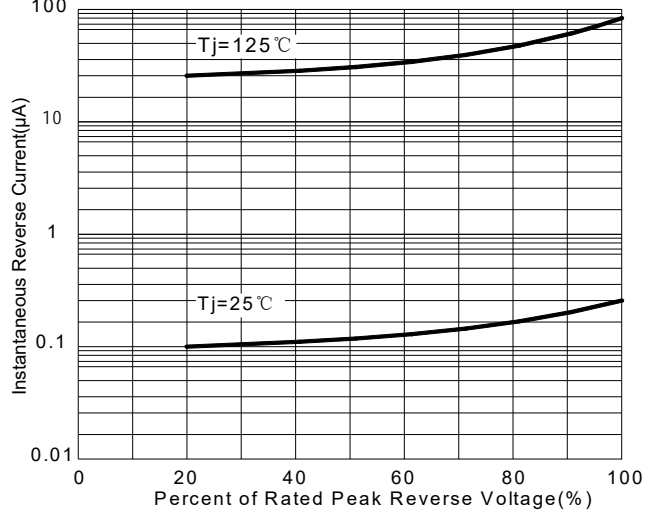
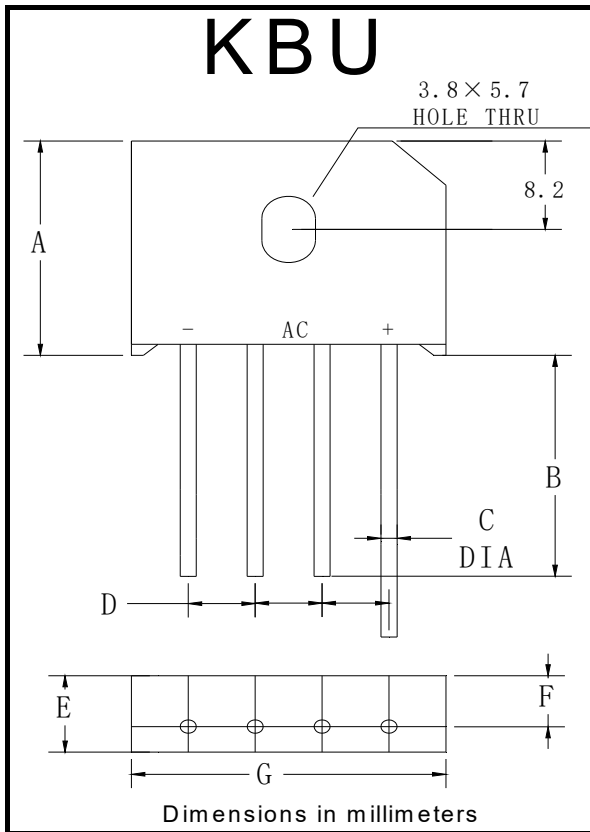


FIG4: Typical Reverse Characteristics



■ 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

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