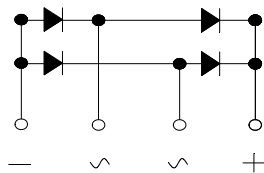
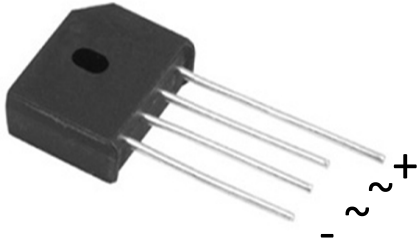


## Bridge Rectifiers



### 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	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 T <sub>c</sub> =115°C						
			Without heatsink T <sub>a</sub> =25°C						
Surge(Non-repetitive)Forward Current@60Hz half-sine wave, 1 cycle, T <sub>a</sub> =25°C	IFSM	A	150						
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	93						
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	KBU8005	KBU801	KBU802	KBU804	KBU806	KBU808	KBU810
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =4A	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						



# KBU8005 THRU KBU810

## ■ Thermal Characteristics ( $T_a=25^\circ\text{C}$ 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	$^\circ\text{C}/\text{W}$	28 <sup>(1)</sup>						
	Between junction and case, With heatsink	R $\theta$ J-C		3.7 <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

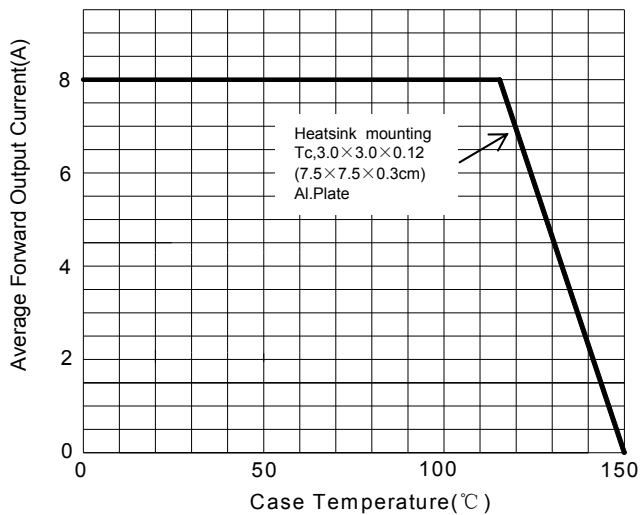


FIG2: Surge Forward Current Capability

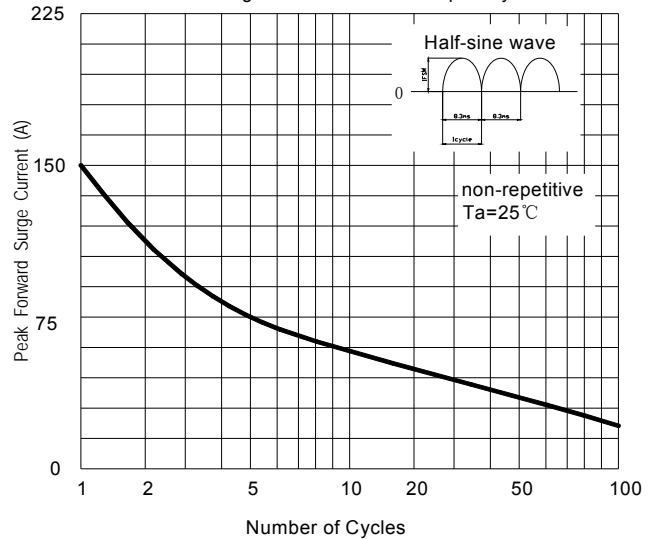


FIG3: Instantaneous Forward Voltage

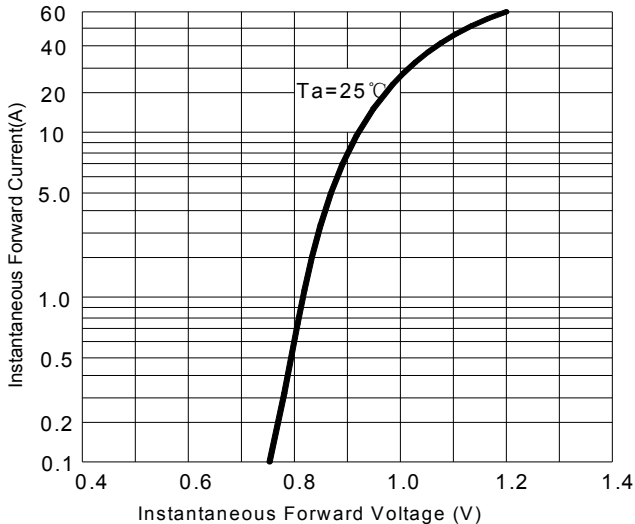
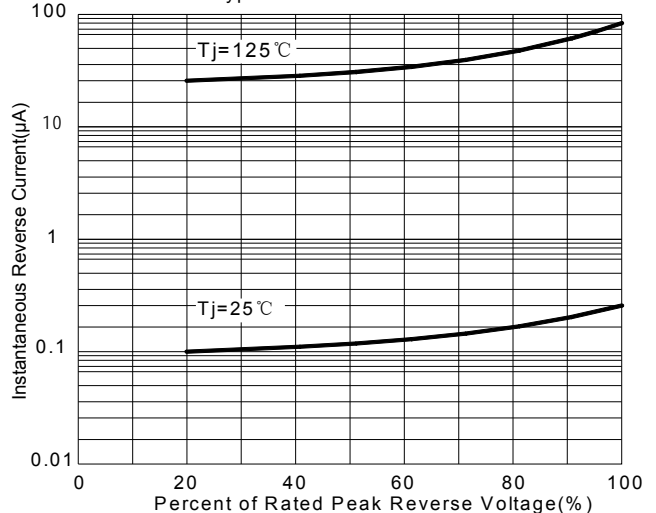


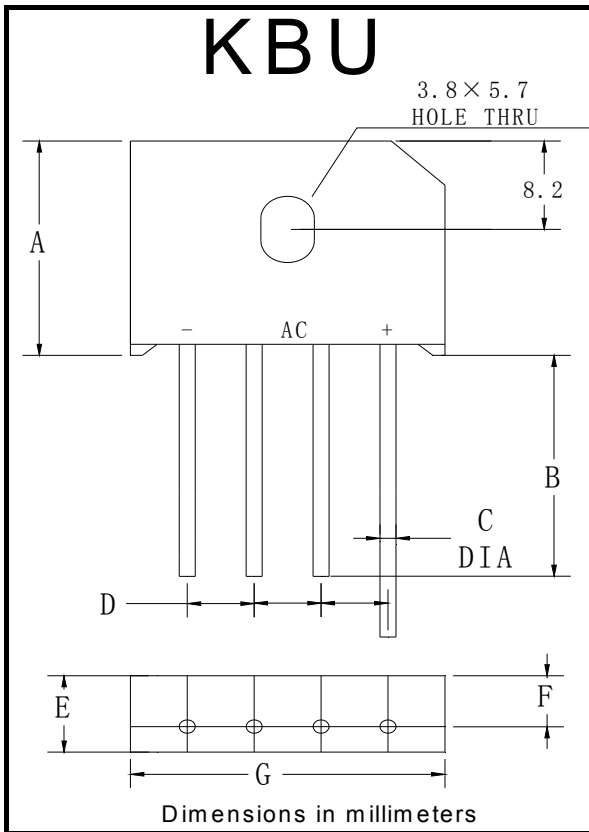
FIG4: Typical Reverse Characteristics





# 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

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