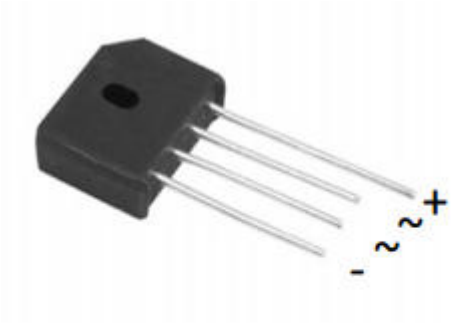
Bridge Rectifiers



Features

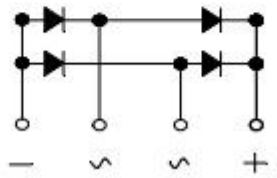
- UL recognition, file #E230084
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

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℃ 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		V_{RRM}	V	50	100	200	400	600	800	1000
Average Rectified Output Current@60Hz sine wave, R-load	With heatsink Tc =115℃	I_O	A	8						
	Without heatsink Ta =25℃			2.8						
Surge(Non-repetitive)Forward Current@60Hz half-sine wave, 1 cycle, Ta=25℃		I_{FSM}	A	150						
Current Squared Time @1ms≤t≤8.3ms Tj=25℃,Rating of per diode		I^2t	A^2S	93						
Storage Temperature		T_{stg}	℃	-55 ~+150						
Junction Temperature		T_j	℃	-55 ~+150						

■ Electrical Characteristics (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBU8005	KBU801	KBU802	KBU804	KBU806	KBU808	KBU810
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=4A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM}	μA	$V_{RM}=V_{RRM}$	10						

■ Thermal Characteristics (Ta=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	KBU8005	KBU801	KBU802	KBU804	KBU806	KBU808	KBU810
Thermal Resistance	Between junction and ambient, Without heatsink	RθJ-A	℃/W	28(1)						
	Between junction and case, With heatsink	RθJ-C		3.7(2)						

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)

PREFERED 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:Io-Tc Curve

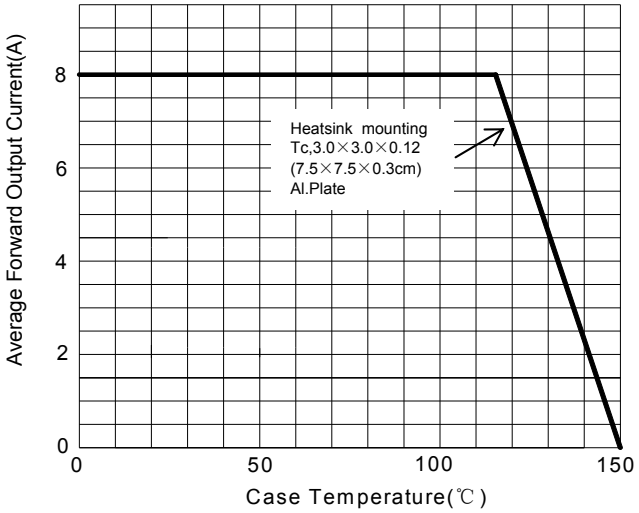


FIG2:Surge Forward Current Capability

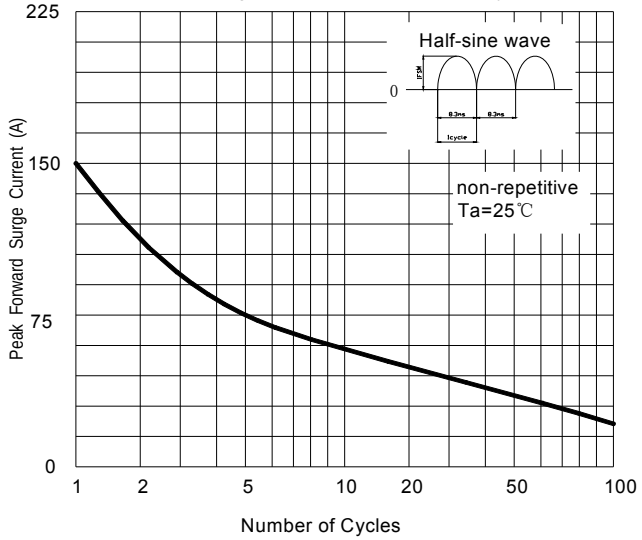


FIG3:Instantaneous Forward Voltage

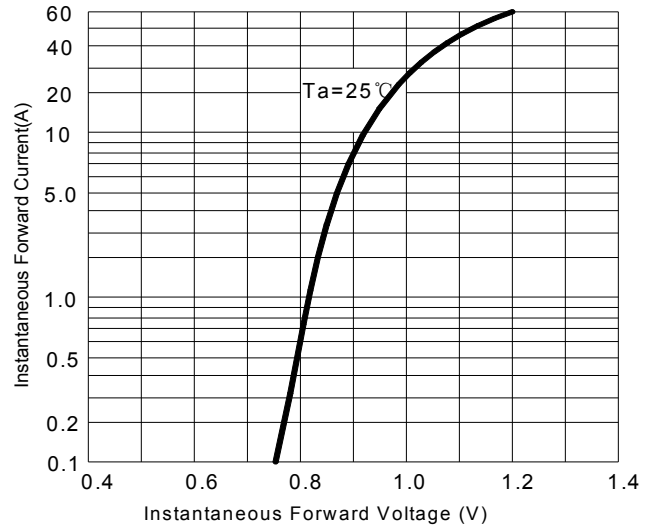
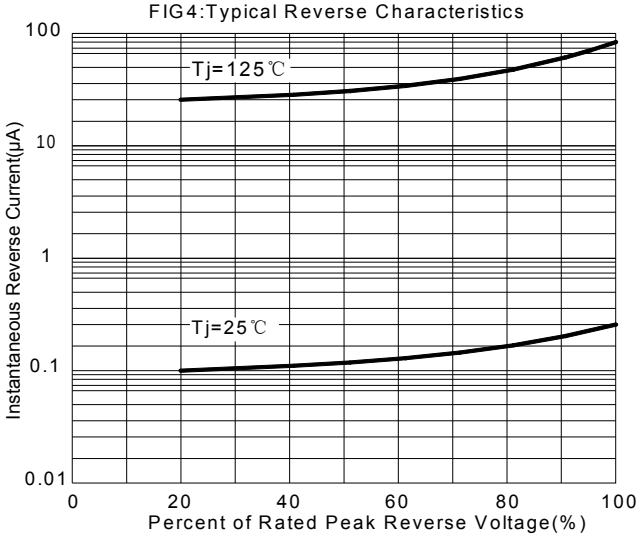
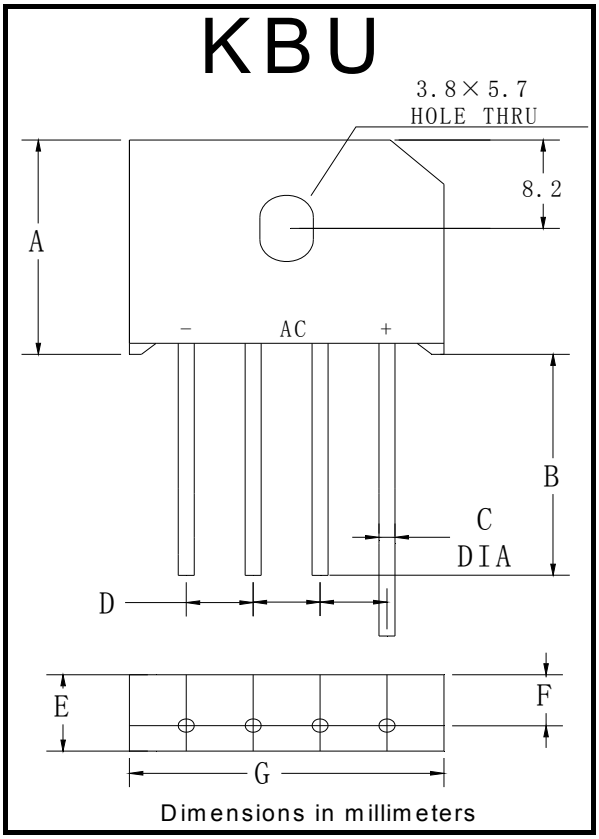


FIG4:Typical Reverse Characteristics



■ 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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