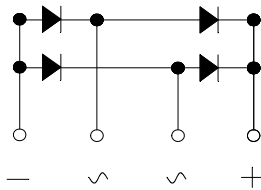
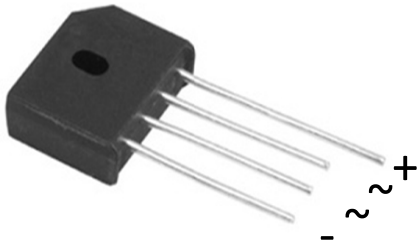


Bridge Rectifiers



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	KBU6005	KBU601	KBU602	KBU604	KBU606	KBU608	KBU610
Device marking code				KBU6005	KBU601	KBU602	KBU604	KBU606	KBU608	KBU610
Repetitive Peak Reverse Voltage		VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load	With heatsink Tc =105℃	IO	A	6						
	Without heatsink Ta =25℃			2.5						
Surge(Non-repetitive)Forward Current @60Hz half-sine wave, 1 cycle, Ta=25℃		IFSM	A	135						
Current Squared Time @1ms≤t≤8.3ms Tj=25℃,Rating of per diode		I²t	A²S	75						
Storage Temperature		Tstg	℃	-55 ~+150						
Junction Temperature		Tj	℃	-55 ~+150						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBU6005	KBU601	KBU602	KBU604	KBU606	KBU608	KBU610
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=3A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	μA	VRM=VRRM	10						



KBU6005 THRU KBU610

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

PARAMETER		SYMBOL	UNIT	KBU6005	KBU601	KBU602	KBU604	KBU606	KBU608	KBU610
Thermal Resistance	Between junction and ambient, Without heatsink	R θ J-A	°C/W	26 ⁽¹⁾						
	Between junction and case, With heatsink	R θ J-C		5 ⁽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)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
KBU6005~KBU610	A1	Approximate 7.2	400	400	2400	Paper Box

■ Characteristics(Typical)

FIG1:I_o-T_c Curve

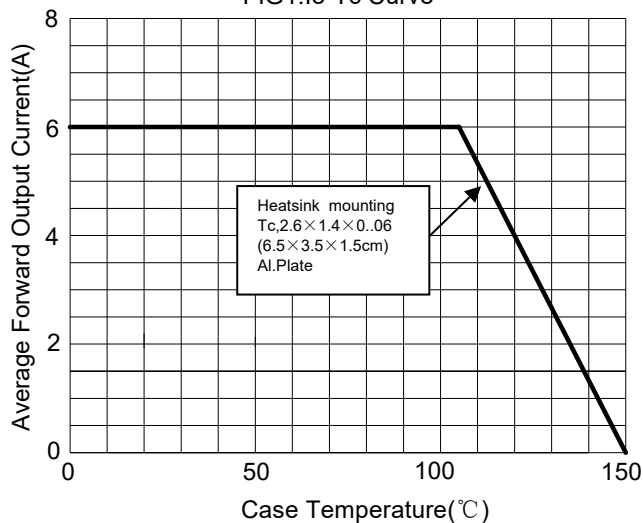


FIG2: Surge Forward Current Capability

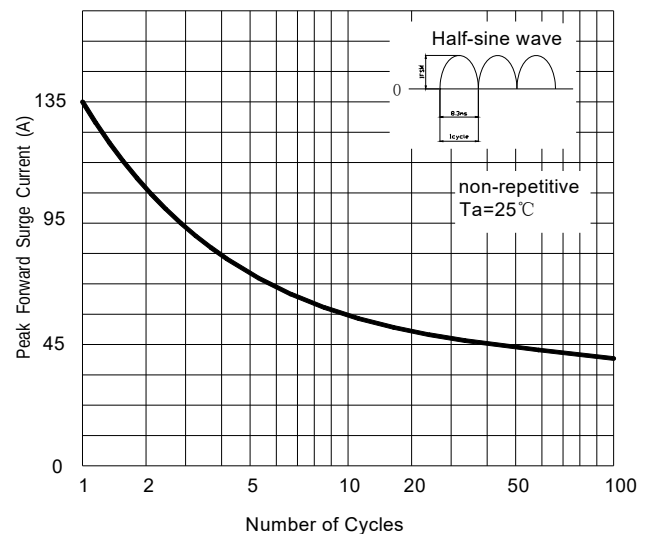


FIG3: Instantaneous Forward Voltage

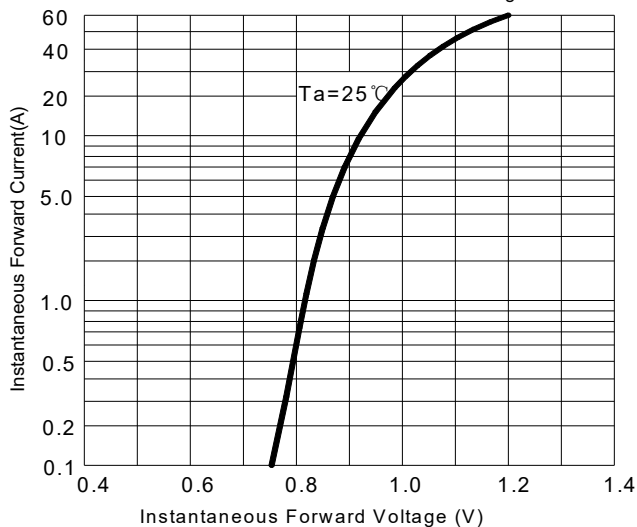
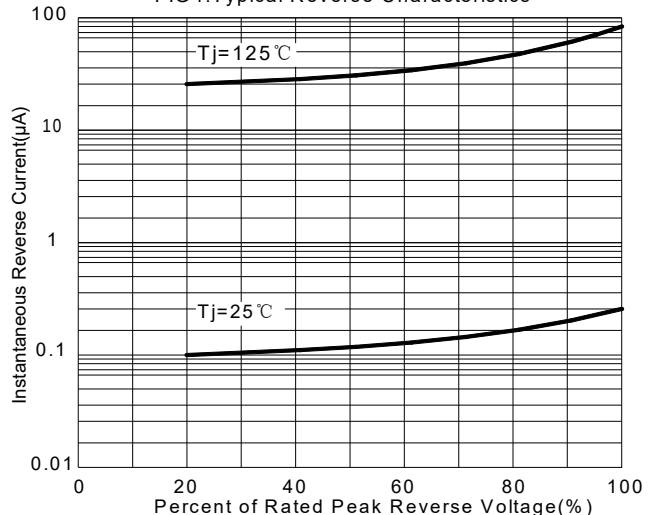


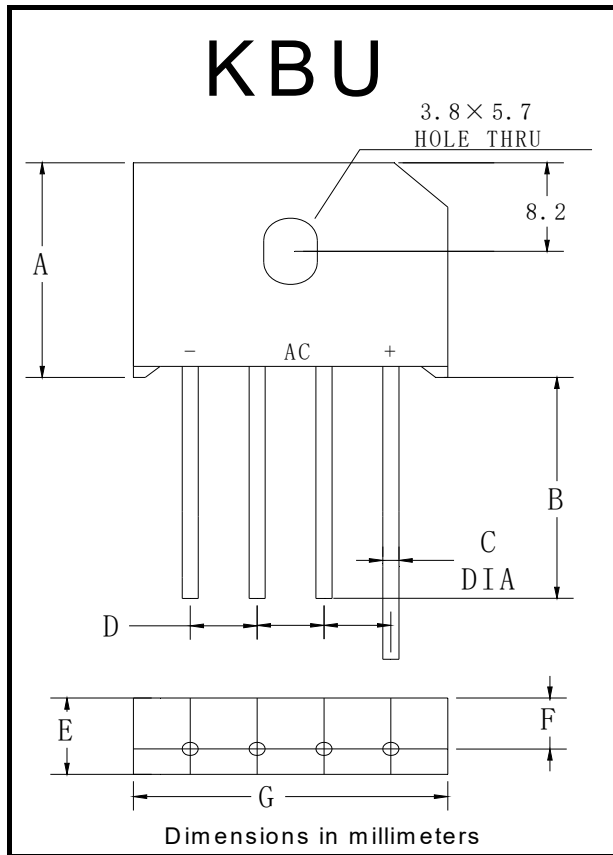
FIG4: Typical Reverse Characteristics





KBU6005 THRU KBU610

■ 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	6.7	7.1
F	4.6	5.0
G	22.7	23.7



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