

Bridge Rectifiers

Features

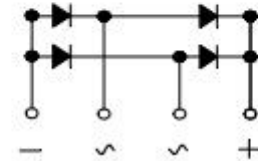
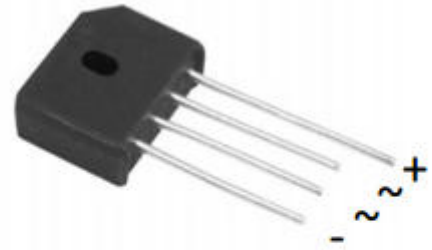
- UL recognition, file #E230084
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

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_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	KBU25005	KBU2501	KBU2502	KBU2504	KBU2506	KBU2508	KBU2510
Device marking code			KBU25005	KBU2501	KBU2502	KBU2504	KBU2506	KBU2508	KBU2510
Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, T _c =115°C	I _O	A	25						
Surge(Non-repetitive)Forward Current @60Hz half-sine wave, 1 cycle, T _j =25°C	I _{FSM}	A	400						
Current Squared Time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² S	666						
Storage Temperature	T _{stg}	°C	-55 ~+150						
Junction Temperature	T _j	°C	-55 ~+150						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBU25005	KBU2501	KBU2502	KBU2504	KBU2506	KBU2508	KBU2510
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =12.5A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =VRRM	10						

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

PARAMETER	SYMBOL	UNIT	KBU25005	KBU2501	KBU2502	KBU2504	KBU2506	KBU2508	KBU2510
Thermal Resistance Between junction and case,	R _{θJ-C}	°C/W	1.4 ⁽¹⁾						

Notes

(1) 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
KBU25005~KBU2510	A1	Approximate 7.2	400	400	2400	Paper Box

■ **Characteristics(Typical)**

FIG1:Io-Tc Curve

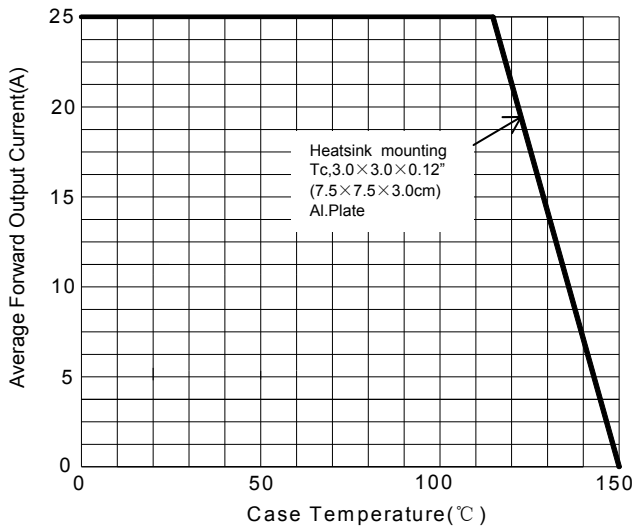


FIG2:Surge Forward Current Capability

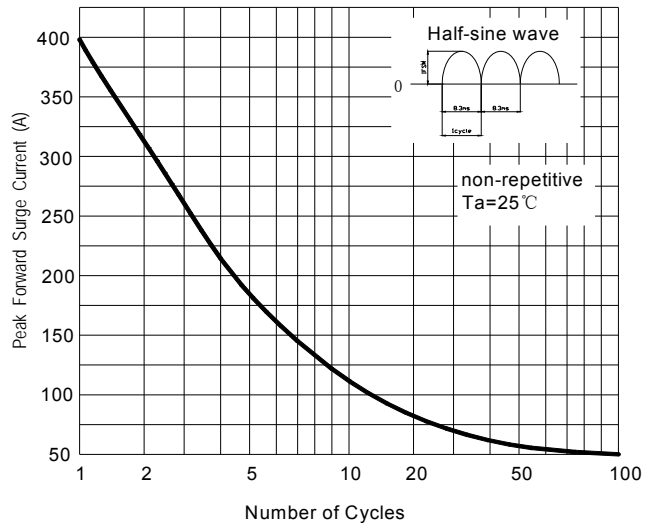


FIG3:Instantaneous Forward Voltage

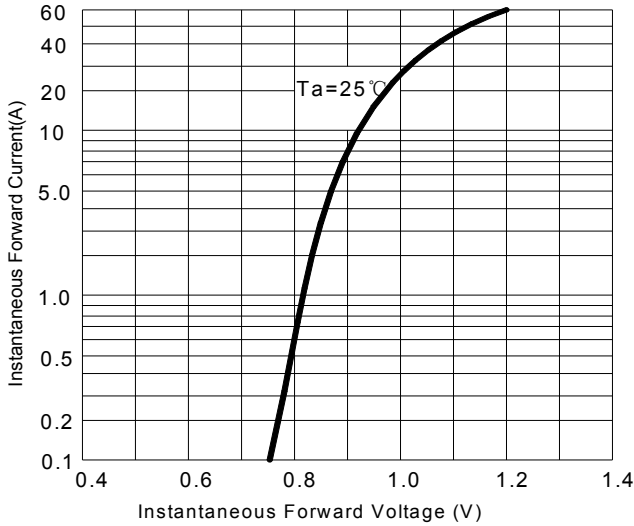
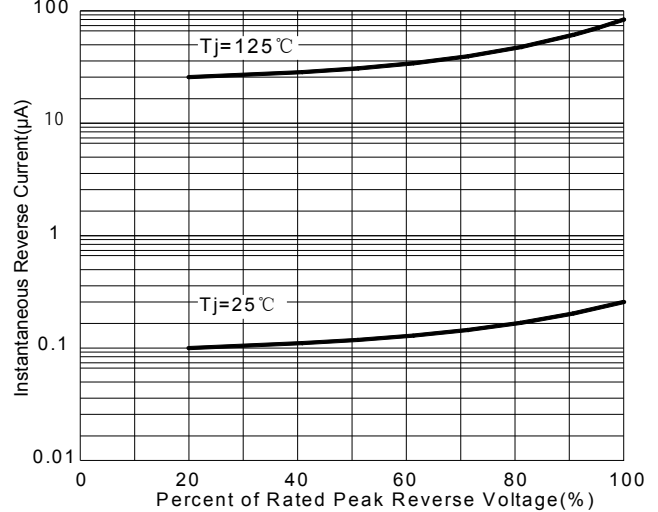
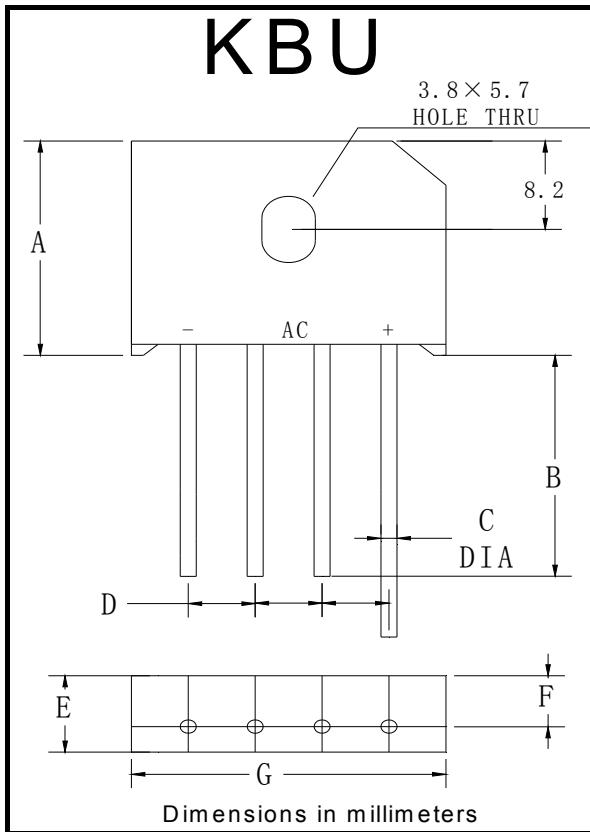


FIG4:Typical Reverse Characteristics



■ 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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