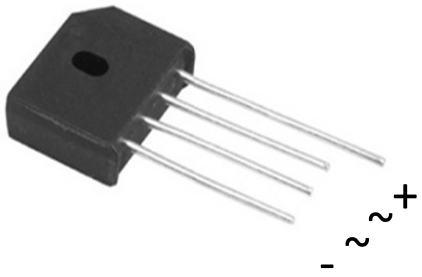
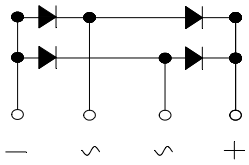
Bridge Rectifiers





Features

- UL recognition, file #E230084
- Glass passivated chip junction
- 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℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	KBU15005	KBU1501	KBU1502	KBU1504	KBU1506	KBU1508	KBU1510
Device marking code				KBU15005	KBU1501	KBU1502	KBU1504	KBU1506	KBU1508	KBU1510
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS Voltage		V_{RMS}	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage		V_{DC}	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load	With heatsink Tc =105℃	I_O	A	15.0						
	Without heatsink Ta =25℃			3.2						
Forward Surge Current (Non-repetitive) @8.3ms, Half-sine wave,1 cycle, Tj=25℃		I_{FSM}	A	220						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃				440						
Current Squared Time @1ms≤t≤8.3ms Tj=25℃,Rating of per diode		I^2t	A^2S	201						
Mounting torque @Recommend torque：5kg·cm		Tor	kg·cm	8						
Storage temperature		T_{stg}	℃	-55 ~ +150						
Junction temperature		T_j	℃	-55 ~ +150						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	KBU15005	KBU1501	KBU1502	KBU1504	KBU1506	KBU1508	KBU1510
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=7.5A	1.0						
Maximum DC reverse current at rated DC blocking voltage per diode	IR	μA	Tj=25℃	5						
			Tj=125℃	100						
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	67						

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

PARAMETER		SYMBOL	UNIT	KBU15005	KBU1501	KBU1502	KBU1504	KBU1506	KBU1508	KBU1510
Typical Thermal Resistance	Between junction and ambient, Without heatsink	RθJ-A	℃/W	25.0						
	Between junction and case, With heatsink	RθJ-C		1.6						

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
KBU15005 ~ KBU1510	A1	Approximate 7.2	400	400	2400	Paper Box

■ Characteristics(Typical)

FIG1:Io-Tc Curve

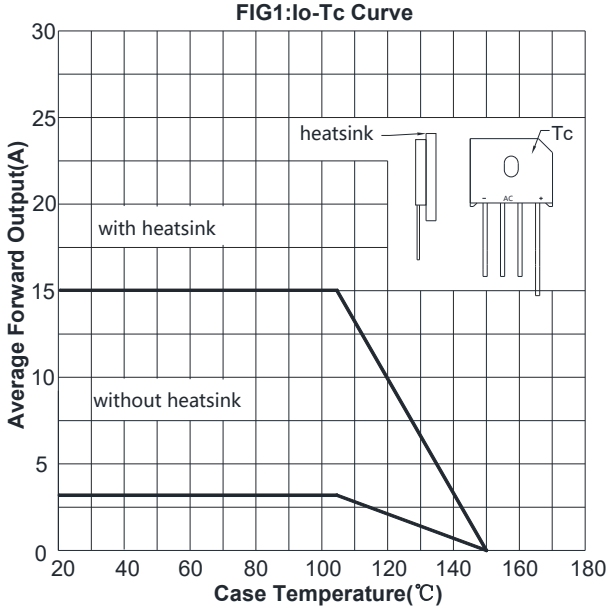
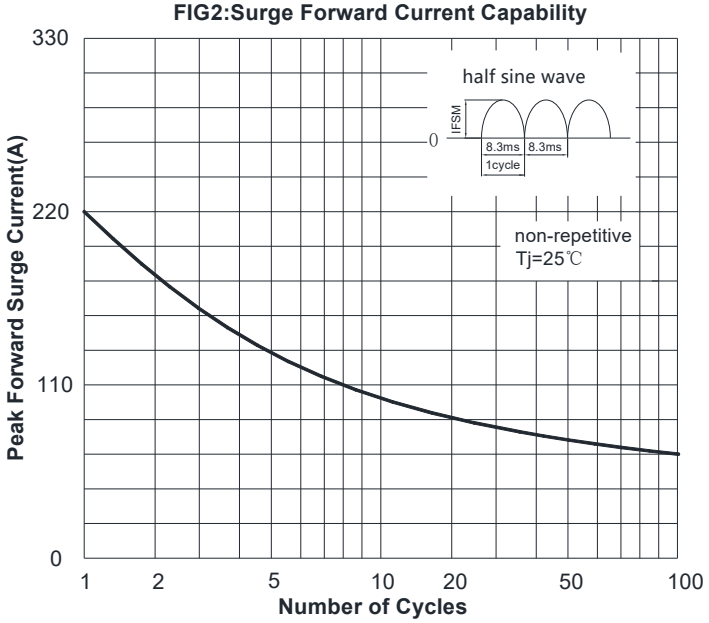
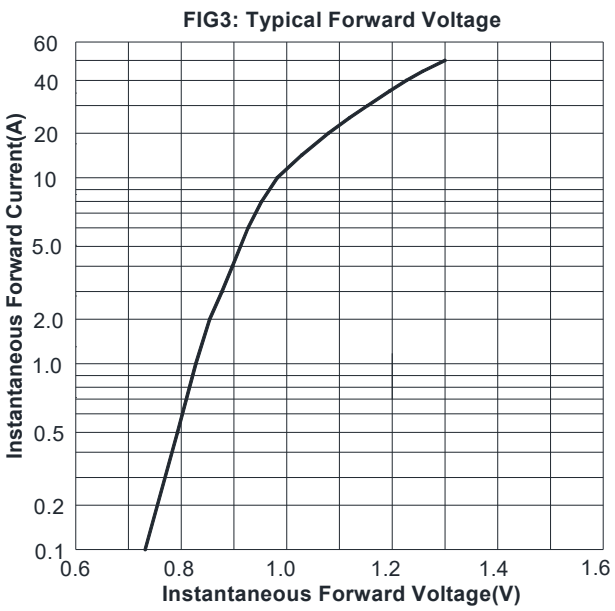
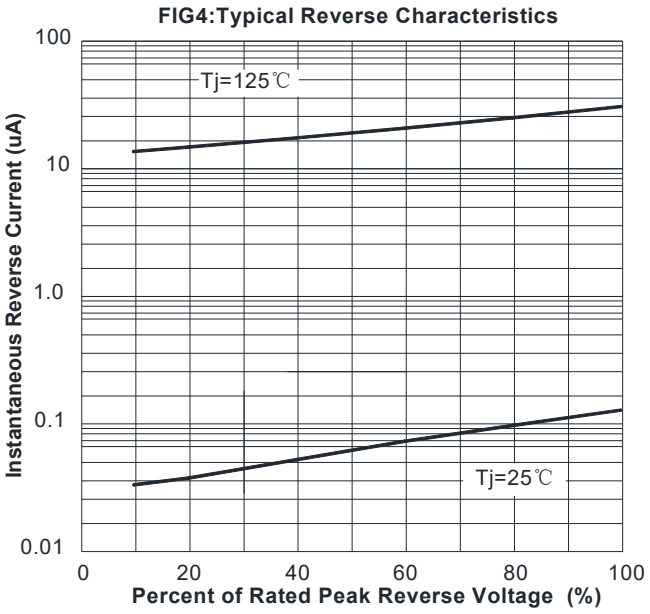


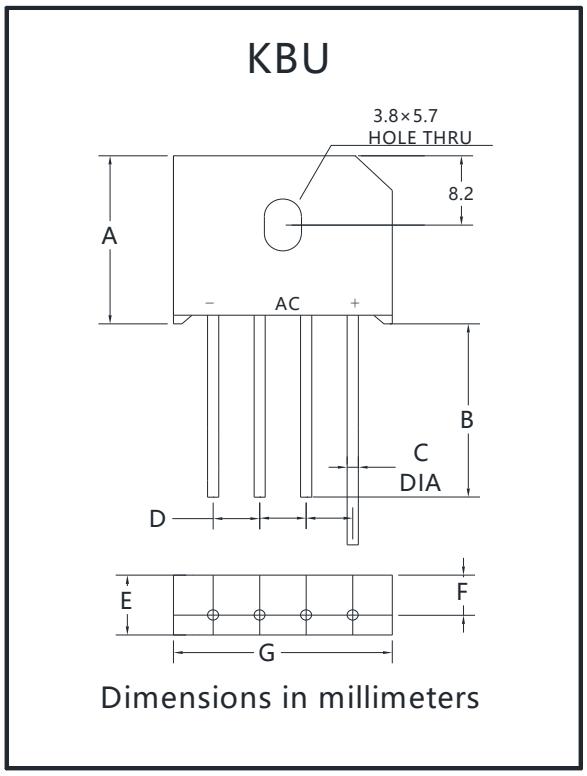
FIG2:Surge Forward Current Capability







■ 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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