

KBU10005 thru KBU1010

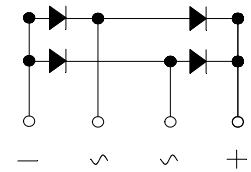
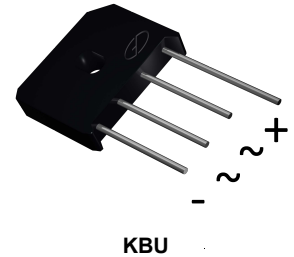
Single-Phase Bridge Rectifiers
 Reverse Voltage 50-1000V Output Current 10A

Features

- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275°C max/ 7sec per JESD 22-B106

Mechanical Data

- Package: KBU
- Molding compound meets UL 94 V-0 flammability rating
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102



Schematic Diagram

Maximum Ratings and Electrical Characteristics

(T_A=25°C unless otherwise noted)

Parameter	Symbol	KBU 10005	KBU 1001	KBU 1002	KBU 1004	KBU 1006	KBU 1008	KBU 1010	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Average Rectified Output Current @60Hz sine wave, R-load, T _c =115°C	I _O	10							A
Surge(Non-repetitive)ForwardCurrent @60Hz half-sine wave, 1 cycle, T _A =25°C	I _{FSM}	170							A
Current Squared Time @1ms≤t≤8.3ms, T _J =25°C,Rating of per Diode	I ₂ t	120							A ² S
Maximum Instantaneous Forward Voltage Drop per Diode@ I _{FM} =5A	V _F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Diode V _{RM} =V _{RRM}	I _{RRM}	10							μA
Storage Temperature	T _{STG}	-55 to +150							°C
Junction Temperature	T _J	-55 to +150							°C

Thermal Characteristics (T_A=25°C unless otherwise noted)

Thermal Resistance Junction to Ambient	R _{θJ-A}	4.7 ¹	°C/W
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Note 1. Units Mounted on an aluminum plate heat sink.

Typical Electrical and Thermal Characteristic Curves

FIG1:Io-Tc Curve

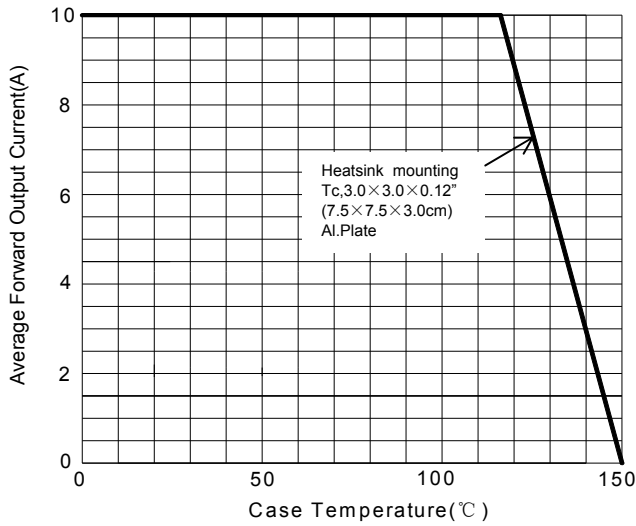


FIG2: Surge Forward Current Capability

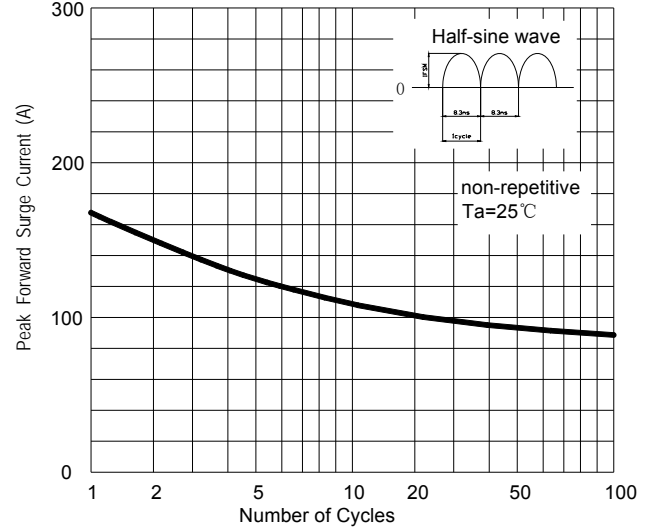


FIG3: Instantaneous Forward Voltage

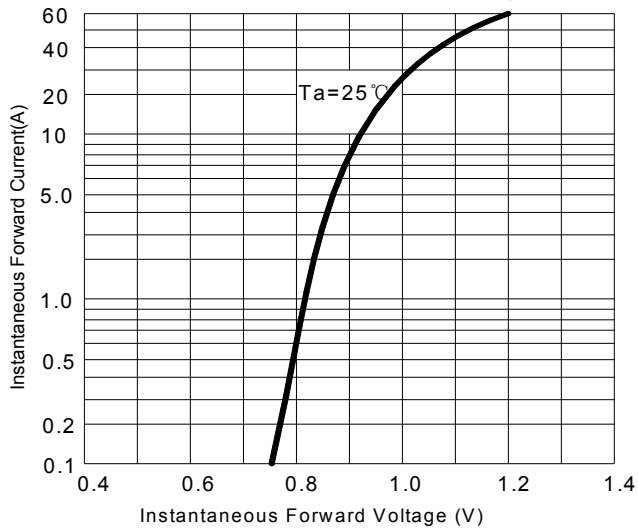
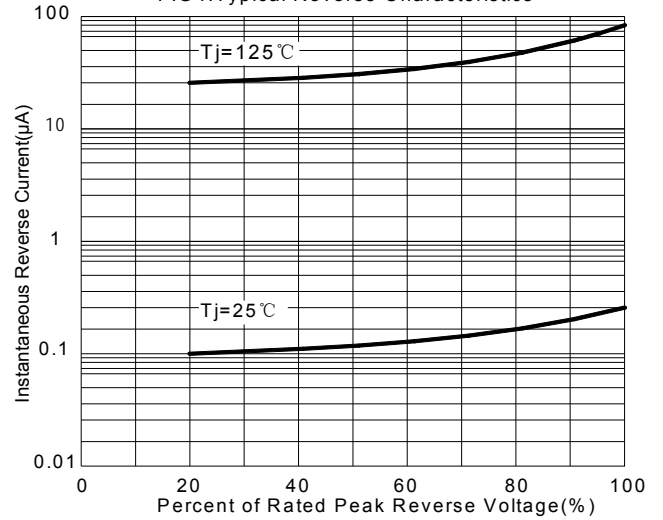


FIG4: Typical Reverse Characteristics

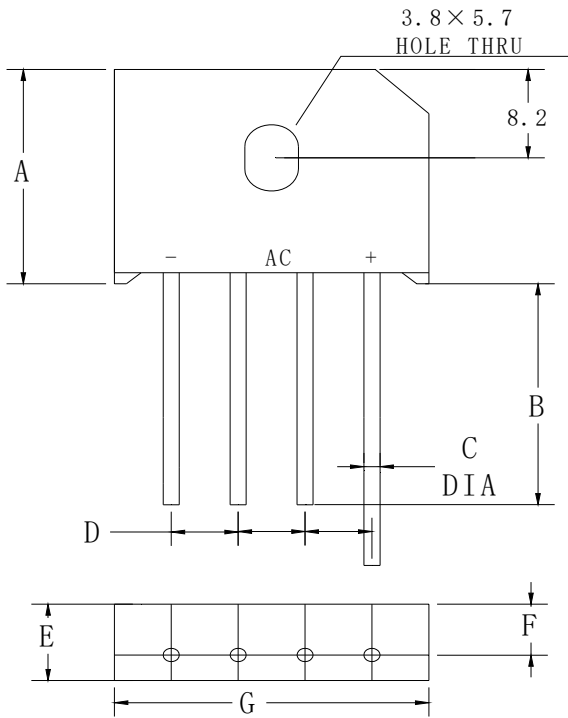


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Package Outline Dimensions

KBU



Dimensions in millimeters

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