

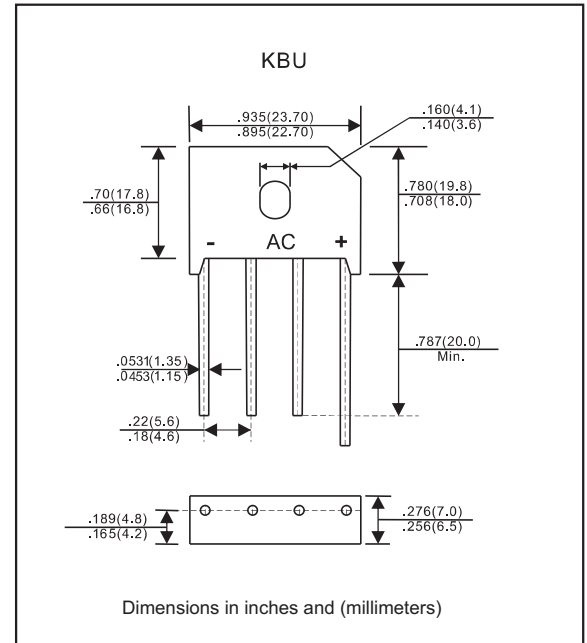
Features

- Surge overload rating 240 amperes peak.
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic Passivated chip junctions.
- Lead-free parts meet RoHS requirements.
- Suffix "-H" indicates Halogen-free part, ex.KBU10005-H.

Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, KBU
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : marked on body
- Mounting Position : Any

Package outline



Maximum ratings and Electrical characteristics (AT $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	With heatsink, note 1, see fig.2	I_O			10.0	A
Forward surge current	8.3ms single half sine-wave (JEDEC methode)	I_{FSM}			240	A
Reverse current	$V_R = V_{RRM} \quad T_J = 25^{\circ}\text{C}$	I_R			5.0	uA
	$V_R = V_{RRM} \quad T_J = 100^{\circ}\text{C}$				1000	
I^2t Rating for fusing	$t < 8.3 \text{ ms}$	I^2t			239	A^2s
Storage temperature		T_{STG}	-65		+175	$^{\circ}\text{C}$

SYMBOLS	V_{RRM}^{*1} (V)	V_{RMS}^{*2} (V)	V_R^{*3} (V)	V_F^{*4} (V)	Operating temperature $T_J, (^{\circ}\text{C})$
KBU10005	50	35	50	1.0	-55 to +125
KBU1001	100	70	100		
KBU1002	200	140	200		
KBU1004	400	280	400		
KBU1006	600	420	600		
KBU1008	800	560	800		
KBU1010	1000	700	1000		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage @ $I_F=5.0\text{A}$

Note 1: Device mounted on 100mm*100mm*1.6mm Cu plate heatsink.

Rating and characteristic curves (KBU10005 THRU KBU1010)

FIG.1-MAXIMUM FORWARD SURGE CURRENT

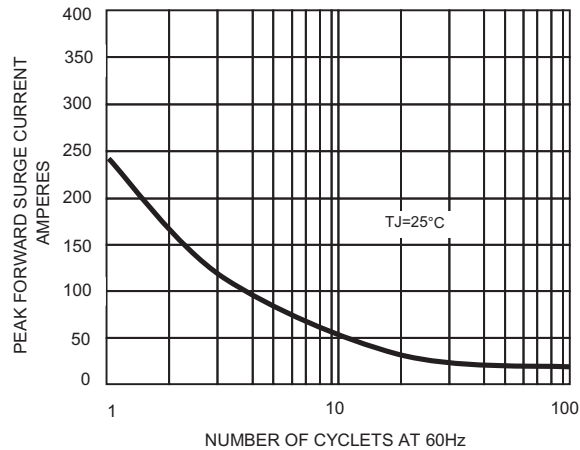


FIG. 2 – DERATING CURVE OUTPUT RECTIFIED CURRENT

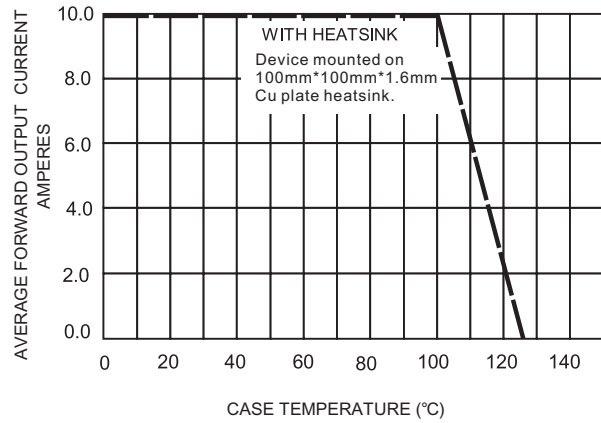


FIG.3- TYPICAL FORWARD CHARACTERISTICS

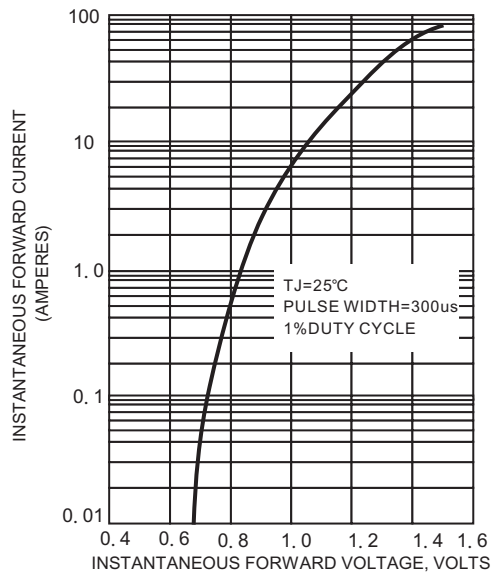
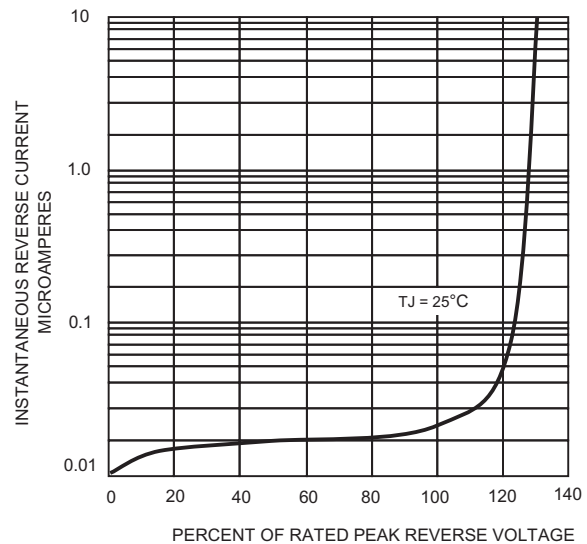
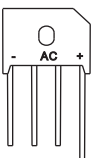
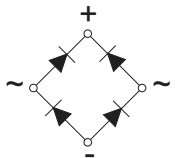


FIG.4- TYPICAL REVERSE CHARACTERISTICS



Pinning information

Simplified outline	Symbol
	

Marking

Type number	Marking code
KBU10005	KBU10005
KBU1001	KBU1001
KBU1002	KBU1002
KBU1004	KBU1004
KBU1006	KBU1006
KBU1008	KBU1008
KBU1010	KBU1010