

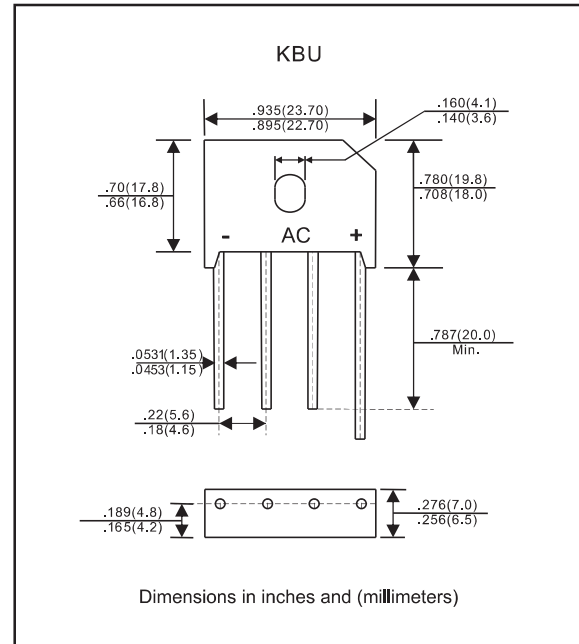
### Features

- 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.KBU8005-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	See Fig.1	$I_o$			8.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	$I_{FSM}$			155	A
Reverse current	$V_R = V_{RRM} T_J = 25^{\circ}\text{C}$	$I_R$			5.0	uA
	$V_R = V_{RRM} T_J = 100^{\circ}\text{C}$				1000	
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 $T_J$ , ( $^{\circ}\text{C}$ )
KBU8005	50	35	50	1.0	-55 to +125
KBU801	100	70	100		
KBU802	200	140	200		
KBU804	400	280	400		
KBU806	600	420	600		
KBU808	800	560	800		
KBU810	1000	700	1000		

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage@ $I_F=4.0\text{A}$

## Rating and characteristic curves (KBU8005 THRU KBU810)

FIG.1-DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT

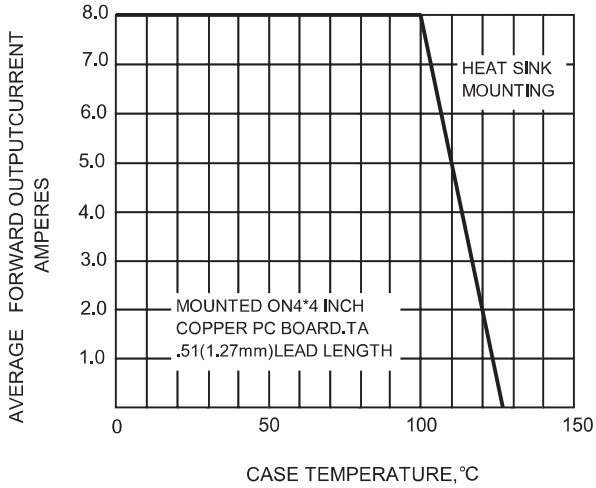


FIG.2 TYPICAL INSTANTANEOUS FORWARD  
CHARACTERISTIC

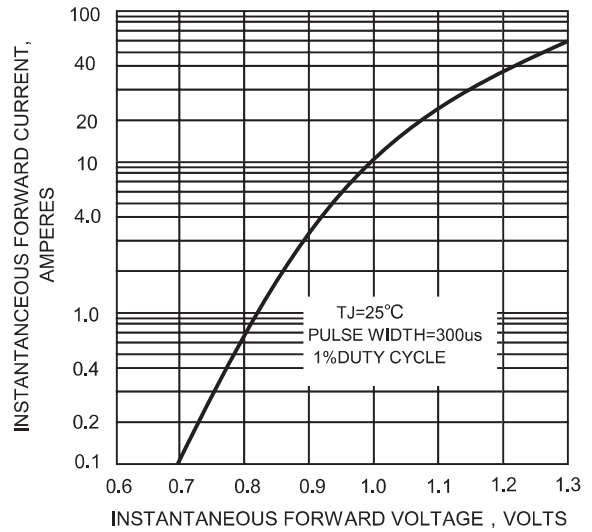


FIG.3-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT

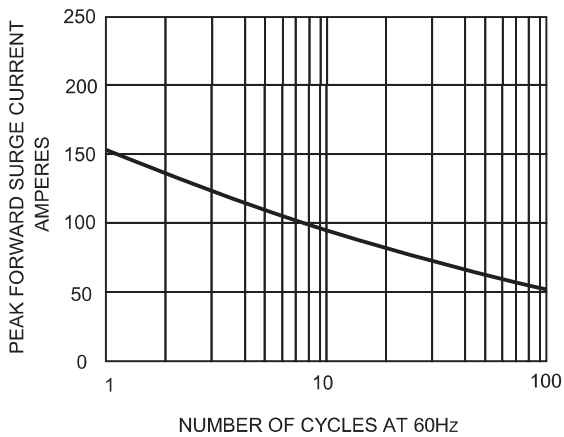


FIG.4-TYPICAL REVERSE  
CHARACTERISTICS

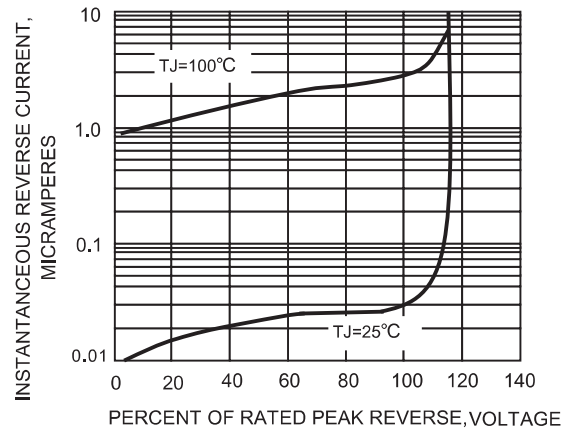
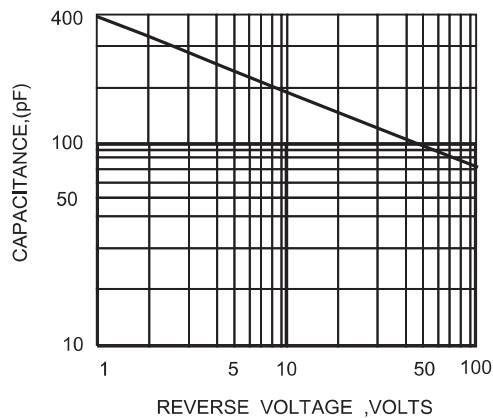
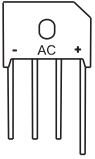
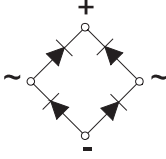


FIG.5-TYPICAL JUNCTION CAPACITANCE PER ELEMENT



### Pinning information

Simplified outline	Symbol
	

### Marking

Type number	Marking code
KBU8005	KBU8005
KBU801	KBU801
KBU802	KBU802
KBU804	KBU804
KBU806	KBU806
KBU808	KBU808
KBU810	KBU810