

# KBU8005 THRU KBU810

## 8.0A Plastic Passivated Single-Phase Bridge Rectifiers-50-1000V

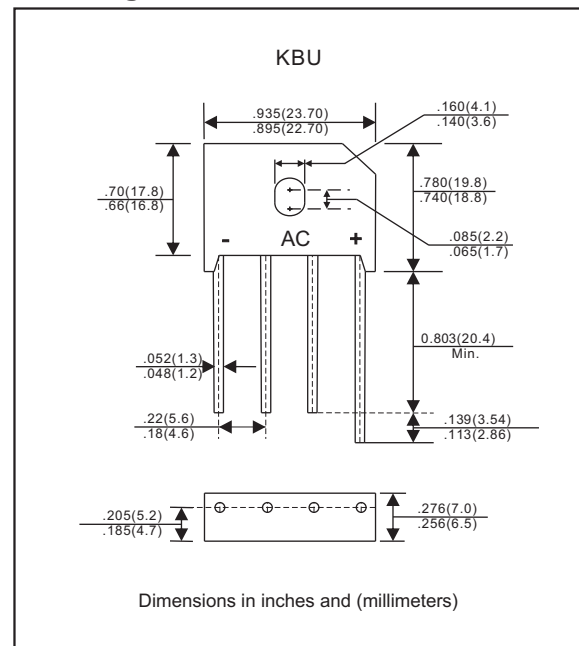
### Features

- Surge overload rating 250 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.
- UL recognized file # E321971
- 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<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	I <sub>O</sub>			8.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I <sub>FSM</sub>			250	A
Reverse current	V <sub>R</sub> = V <sub>RRM</sub> T <sub>J</sub> = 25°C	I <sub>R</sub>			10	uA
	V <sub>R</sub> = V <sub>RRM</sub> T <sub>J</sub> = 100°C				1000	
Storage temperature		T <sub>STG</sub>	-65		+175	°C

SYMBOLS	V <sub>RRM</sub> <sup>*1</sup> (V)	V <sub>RMS</sub> <sup>*2</sup> (V)	V <sub>R</sub> <sup>*3</sup> (V)	V <sub>F</sub> <sup>*4</sup> (V)	Operating temperature T <sub>J</sub> (°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@IF=4.0A

## Rating and characteristic curves (KBU8005 THRU KBU810)

FIG.1-DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT

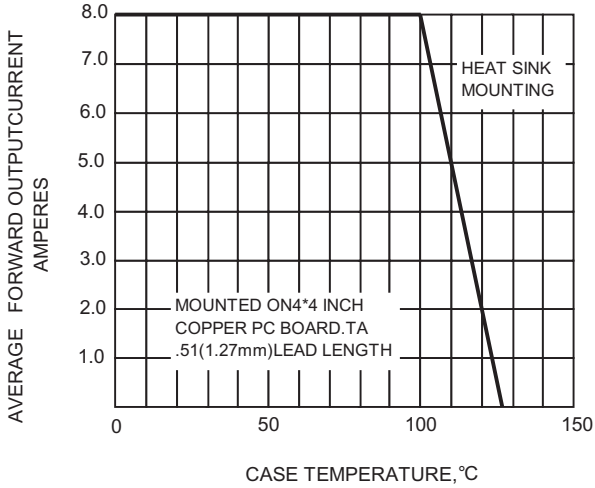


FIG.2 TYPICAL INSTANTANEOUS FORWARD  
CHARACTERISTIC

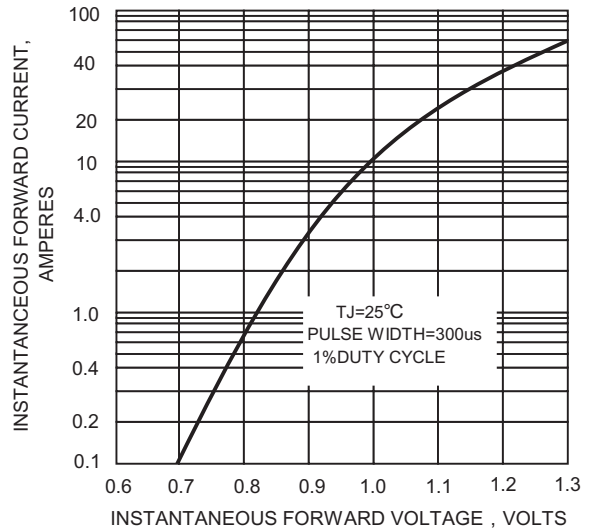


FIG.3-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT

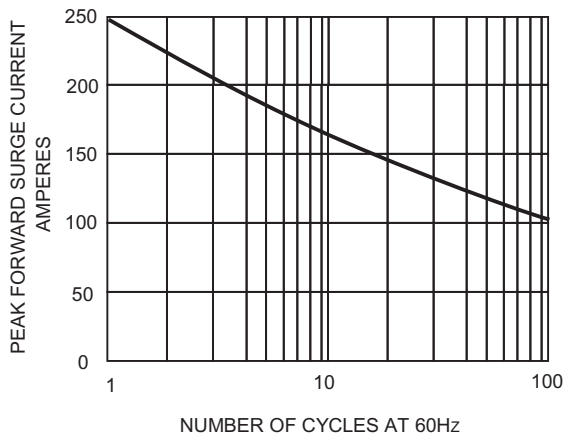


FIG.4-TYPICAL REVERSE  
CHARACTERISTICS

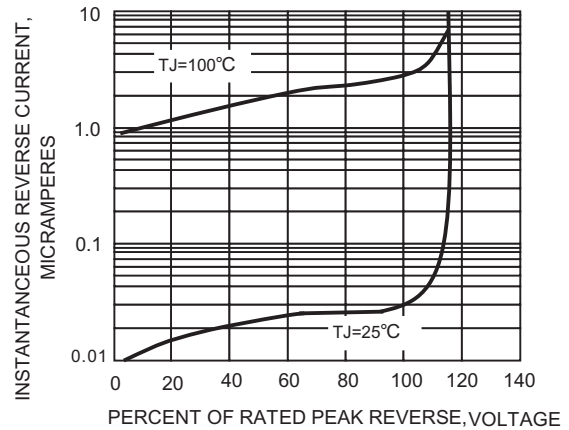
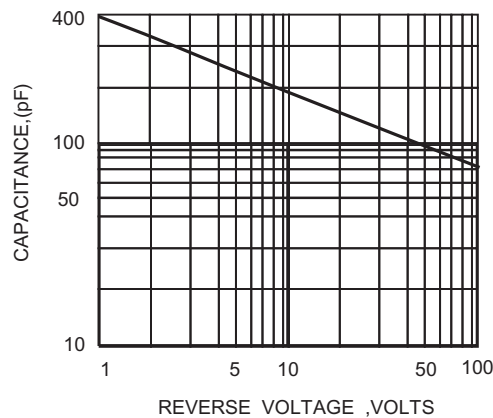
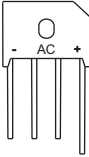
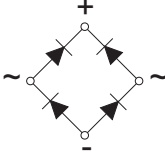


FIG.5-TYPICAL JUNCTION CAPACITANCE PER ELEMENT



# KBU8005 THRU KBU810

## Pinning information

Simplified outline	Symbol
	

## Marking

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