

KBU8005 THRU KBU810

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

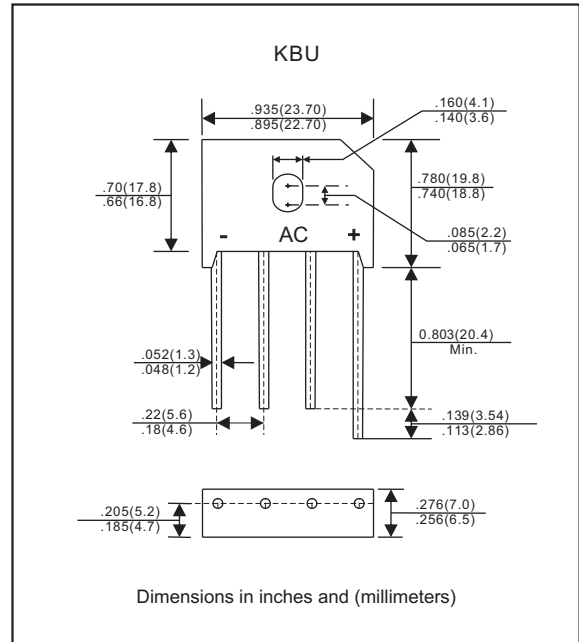
Features

- 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
- Weight : Approximated 8.00 gram

Package outline



Maximum ratings and Electrical Characteristics (AT T_A=25°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}			250	A
Reverse current	V _R = V _{RRM} T _J = 25°C	I _R			10	uA
	V _R = V _{RRM} T _J = 100°C				1000	
Storage temperature		T _{STG}	-65		+175	°C

SYMBOLS	V _{RRM} ^{*1} (V)	V _{RMS} ^{*2} (V)	V _R ^{*3} (V)	V _F ^{*4} (V)	Operating temperature T _J (°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

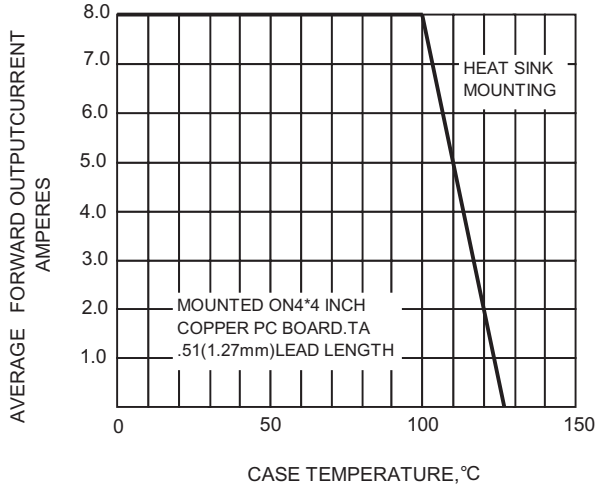


FIG.2 TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTIC

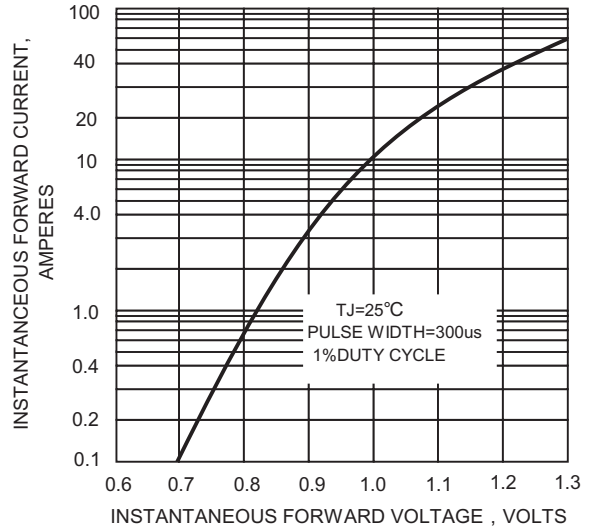


FIG.3-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

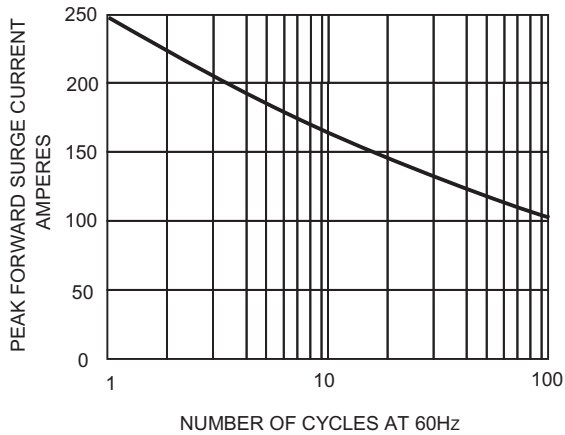


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

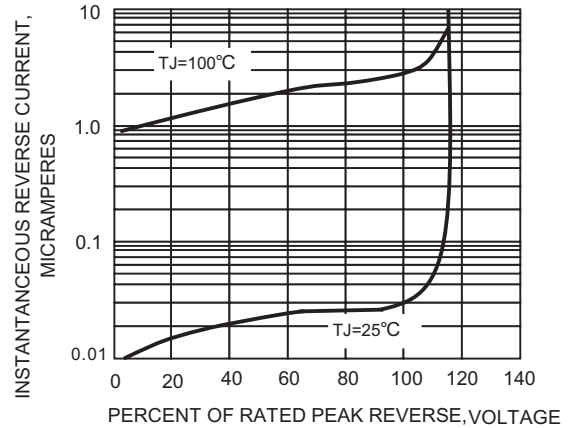
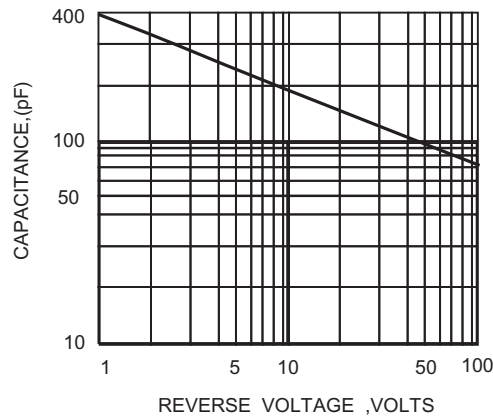
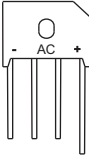
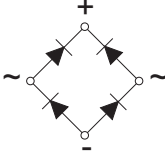


FIG.5-TYPICAL JUNCTION CAPACITANCE PER ELEMENT



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Pinning information

Simplified outline	Symbol
	

Marking

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