



# KBU4005 THRU KBU410

## Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers

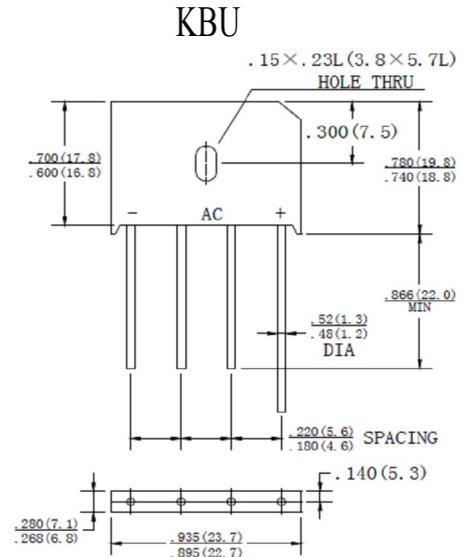
Voltage Range: 50 to 1000 Volts Current : 4.0 Amperes

### Features

- UL Recognized File # E-230084
- Ideal for printed circuit board
- Reliable low cost construction technique results in inexpensive product
- High temperature soldering guaranteed:  
260 °C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension

### Mechanical Data

- Case: Molded plastic
- Lead: solder plated
- Polarity: As marked



Dimension in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number		KBU 4005	KBU 401	KBU 402	KBU 404	KBU 406	KBU 408	KBU 410	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A = 50^\circ C$	$I(AV)$	4.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	150							A
Maximum Instantaneous Forward Voltage @ 4.0A	$V_F$	1.0							V
Maximum DC Reverse Current @ $T_A = 25^\circ C$ rated DC blocking voltage per leg $T_A = 125^\circ C$	$I_R$	5 500							$\mu A$
Typical Thermal Resistance (Note1) (Note2)	$R_{\theta JA}$ $R_{\theta JL}$	19 4.0							$^\circ C/W$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ C$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ C$

NOTE : 1. Units Mounted on P.C.B. with 0.5×0.5" (12×12mm) Copper Pads,0.375" (9.5mm)Lead Length.

2. Units Mounted on a 2.0×1.6×0.3" Thick(5×4×0.8cm)Al.Plate.

# RATING AND CHARACTERISTIC CURVES

FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

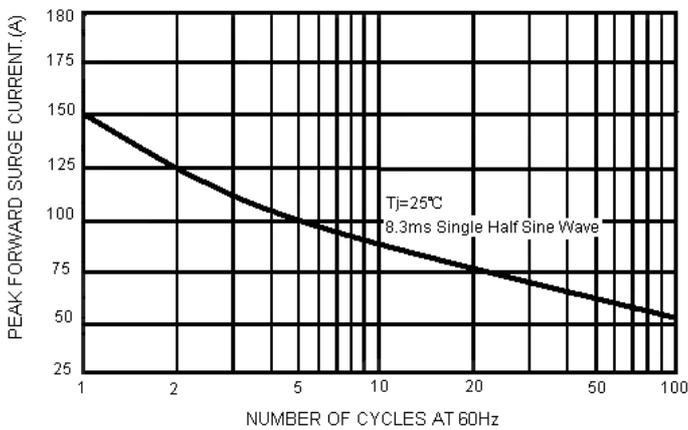


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

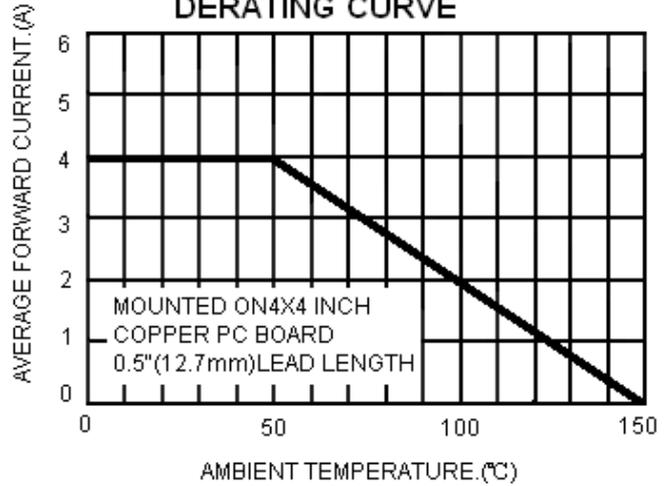


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

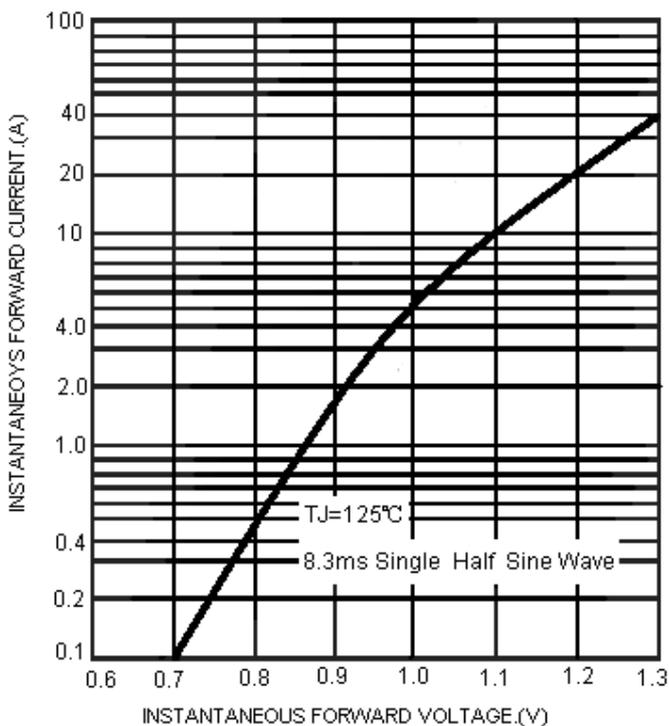


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

