



## KBJ401G THRU KBJ410G CLASS PASSIVATED SINGLE - PHASE BRIDGE RECTIFIERS



### FEATURES

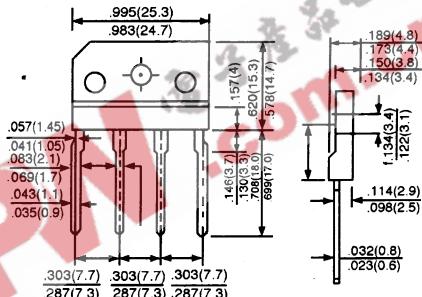
- \* Plastic Package has Underwriters Laboratory Flammability Classification 94V - 0
- \* Ideal for printed circuit boards
- \* Glass passivated chip junction
- \* High Surge Current Capability
- \* High temperature Soldering Guaranteed 260°C/10 Seconds, 0.375"(9.5mm) lead length

### MECHANICAL DATA

- \* Case: Molded plastic body over passivated junctions

Reverse Voltage 100 to 1000 Volts  
Forward Current 4.0A

**KBJ**



Dimensions 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	SYMBOLS	KBJ 401G	KBJ 402G	KBJ 404G	KBJ 406G	KBJ 408G	KBJ 410G	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum D.C Blocking Voltage	$V_{DC}$	100	200	400	600	800	1000	V
Maximum average forward $T_C = 100^\circ\text{C}$ (NOTE 1) rectified output current $T_A = 40^\circ\text{C}$ (NOTE 2)	$I_{F(AV)}$			4 2.3				A
Peak forward surge current 8.3ms single half sine - wave superimposed on rated load (JEDEC Method)	$I_{FSM}$			120				A
Maximum instantaneous forward drop per element at 4.0A	$V_F$			1.1				V
Maximum DC reverse current at rated $T_A = 25^\circ\text{C}$ DC blocking Voltage per element $T_A = 125^\circ\text{C}$	$I_R$			5.0 500				$\mu\text{A}$
Typical junction capacitance (NOTE 3)	$C_J$			45				pF
Typical thermal resistance per leg (NOTE 1)	$R_{TJC}$			5.5				$^\circ\text{C/W}$
Operation Temperature and storage temperature range	$T_J, T_{STG}$			-65 to +150				$^\circ\text{C}$

NOTES: 1. Unit case mounted on 2.95 x 2.95 x 0.06"(75 x 75 x 1.6mm) Cu plate heatsink

2. Unit mounted on P.C. B 0.5 x 0.5"(12 x 12mm) copper pads and 0.375"(9.5mm) lead length

3. Measured at 1MHz and applied reverse Voltage of 4.0 Volts



## RATINGS AND CHARACTERISTIC CURVES

KBJ401G THRU KBJ410G

FIG. 1 – FORWARD CURRENT DERATING CURVE

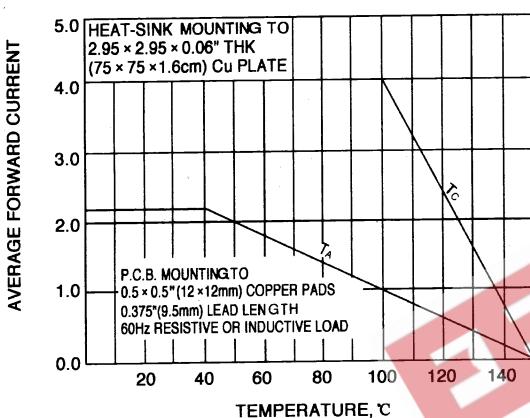


FIG. 2 – MAXIMUM NON – REPETITIVE  
FORWARD SURGE CURRENT – PER ELEMENT

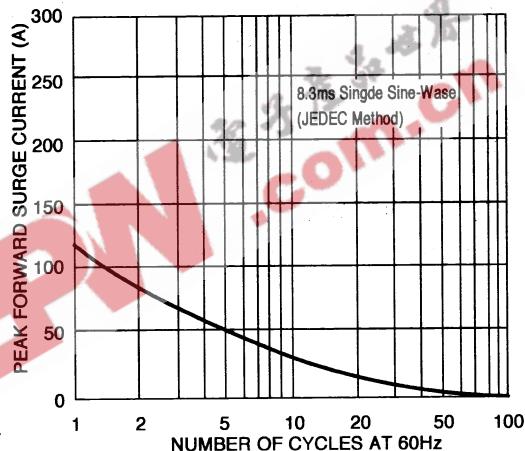


FIG. 3 – TYPICAL INSTANTANEOUS  
FORWARD CHARACTERISTICS – PER ELEMENT

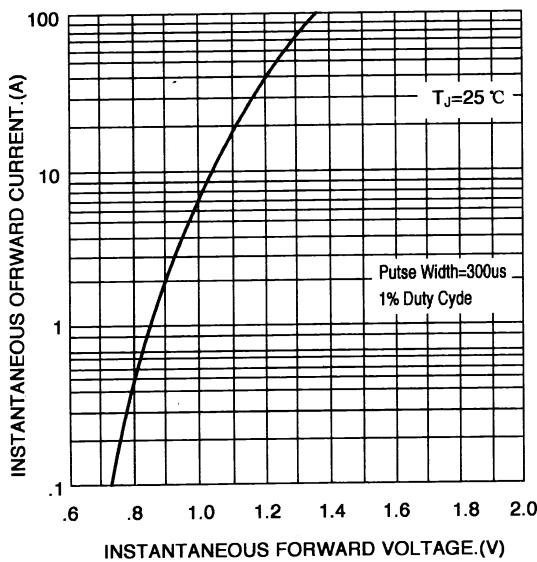


FIG. 4 – TYPICAL REVERSE  
CHARACTERISTICS – PER ELEMENT

