



# KBL400 THRU KBL410

## SINGLE PHASE 4.0 AMPS . SILICON BRIDGE RECTIFIERS

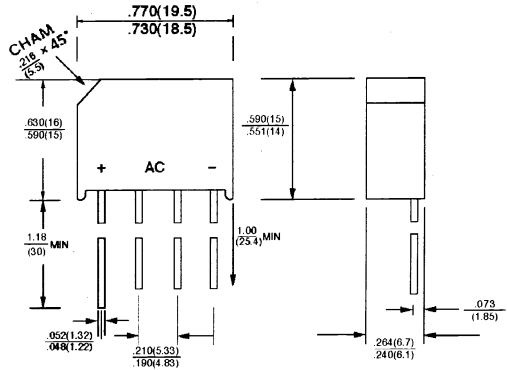


### FEATURES

- \* Ideal for printed circuit board
- \* High Surge Current Capability
- \* Reliable low cost construction
- \* Leads solderable per MIL-STD-202, method 208

**VOLTAGE RANGE**  
50 to 1000 Volts  
**CURRENT**  
4.0 Amperes

### KBL



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

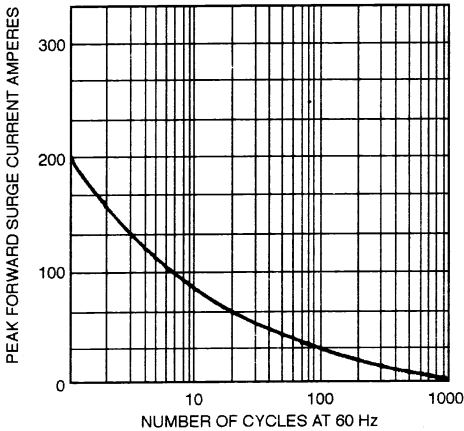
Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

TYPE NUMBER	SYMBOLS	KBL 400	KBL 401	KBL 402	KBL 404	KBL 406	KBL 408	KBL 410	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum D. C Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A = 50^\circ C$	$I_{F(AV)}$	4.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	200							A
Maximum Forward Voltage Drop per element @ 2.0A	$V_F$	1.10							V
Maximum Reverse Current at Rated @ $T_A = 25^\circ C$ D. C. Blocking Voltage per element @ $T_A = 100^\circ C$	$I_R$	10 500							$\mu A$ $\mu A$
Typical thermal resistance per leg (NOTE 1) (NOTE 2)	$R_{\theta JA}$ $R_{\theta JL}$	19 2.4							$^\circ C/W$
Operating Temperature Range	$T_J$	- 55 to + 125							$^\circ C$
Storage Temperature Range	$T_{STG}$	- 55 to + 150							$^\circ C$

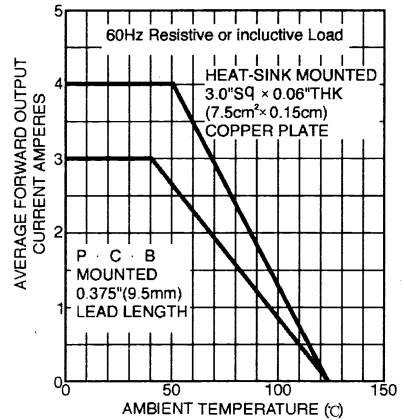
NOTE: (1) Thermal resistance from junction to ambient with units mounted on 3.0 x 3.0 x 0.11" thick (7.5 x 7.5 x 0.3cm) Al. plate  
(2) Thermal resistance from junction to lead with units mounted on P. C. B. at 0.375" (9.5mm) lead length and 0.5 x 0.5" (12 x 12mm) copper pads

## RATINGS AND CHARACTERISTIC CURVES (KBL400 THRU KBL410)

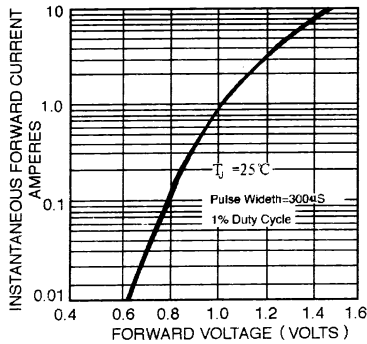
**FIG. 1-MAXIMUM NON - REPETITIVE PEAK FORWARD SURGE CURRENT - PER ELEMENT**



**FIG. 2-TYPICAL FORWARD OUTPUT CURRENT DERATING CURVE**



**FIG. 3-TYPICAL FORWARD CHARACTERISTICS - PER ELEMENT**



**FIG. 4-TYPICAL REVERSE CHARACTERISTICS PER ELEMENT**

