



KBL400 THRU KBL410

SINGLE PHASE 4.0 AMPS. SILICON BRIDGE RECTIFIERS

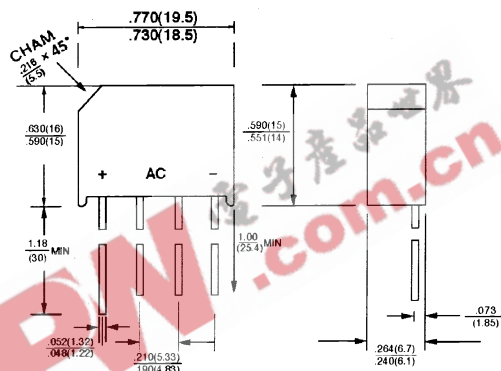


FEATURES

- * 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 @ $T_A = 50^\circ\text{C}$	$I_{F(AV)}$	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 @ $T_A = 25^\circ\text{C}$ D.C. Blocking Voltage per element @ $T_A = 100^\circ\text{C}$	I_R	10 500							μA μA
Typical thermal resistance per leg (NOTE 1) (NOTE 2)	$R_{\theta JA}$ $R_{\theta JL}$	19 2.4							$^\circ\text{C/W}$
Operating Temperature Range	T_J	- 55 to + 125							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 150							$^\circ\text{C}$

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

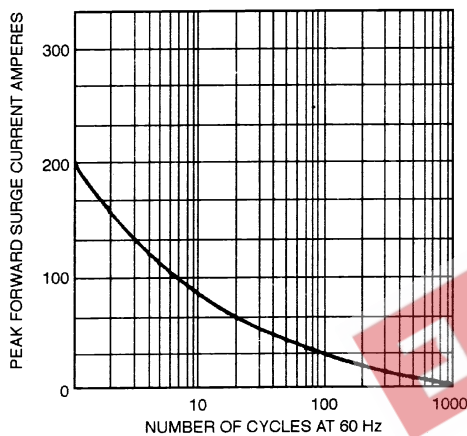


FIG. 2-TYPICAL FORWARD OUTPUT
CURRENT DERATING CURVE

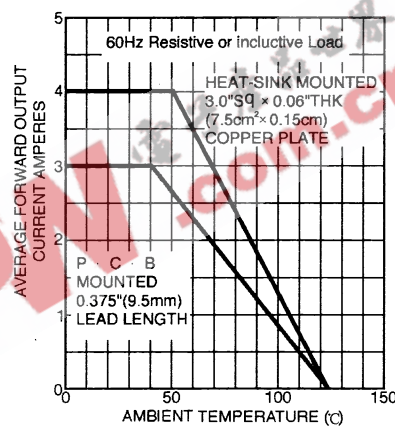


FIG. 3-TYPICAL FORWARD
CHARACTERISTICS - PER ELEMENT

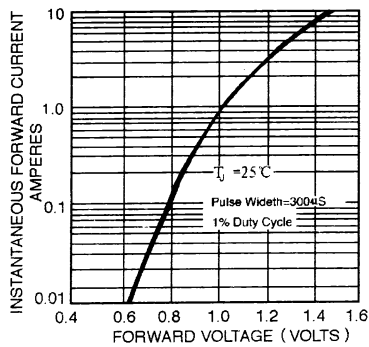


FIG. 4-TYPICAL REVERSE CHARACTERISTICS
PER ELEMENT

