

KBL400 THRU KBL410

SINGLE PHASE 4.0 AMPS. SILICON BRIDGE RECTIFIERS

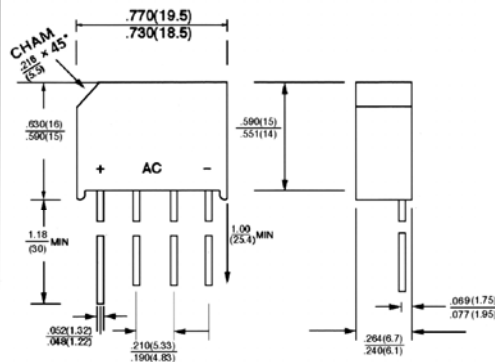


FEATURES

- * 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 | | | $^\circ\text{C}/\text{W}$ |
| 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

HV COMPONENT ASSOCIATES

P.O. Box 848 Farmingdale, NJ 07727
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RATINGS AND CHARACTERISTIC CURVES (KBL400 THRU KBL410)

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

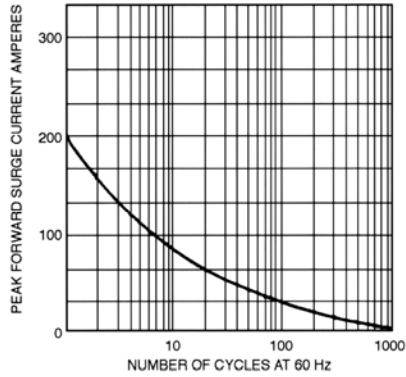


FIG. 2-TYPICAL FORWARD OUTPUT CURRENT DERATING CURVE

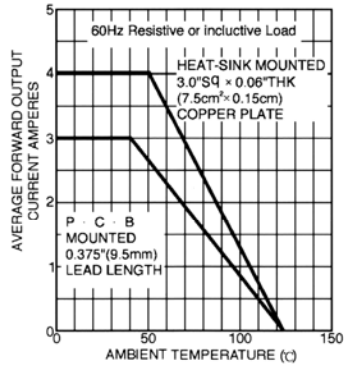


FIG. 3-TYPICAL FORWARD CHARACTERISTICS - PER ELEMENT

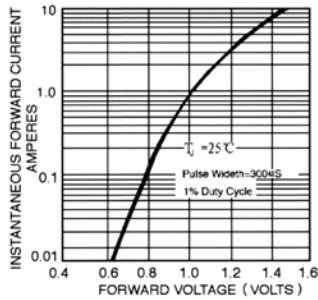
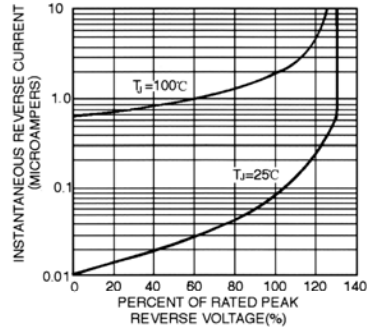


FIG. 4-TYPICAL REVERSE CHARACTERISTICS PER ELEMENT



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