

KBL400 - KBL410

PRV : 50 - 1000 Volts

Io : 4.0 Amperes

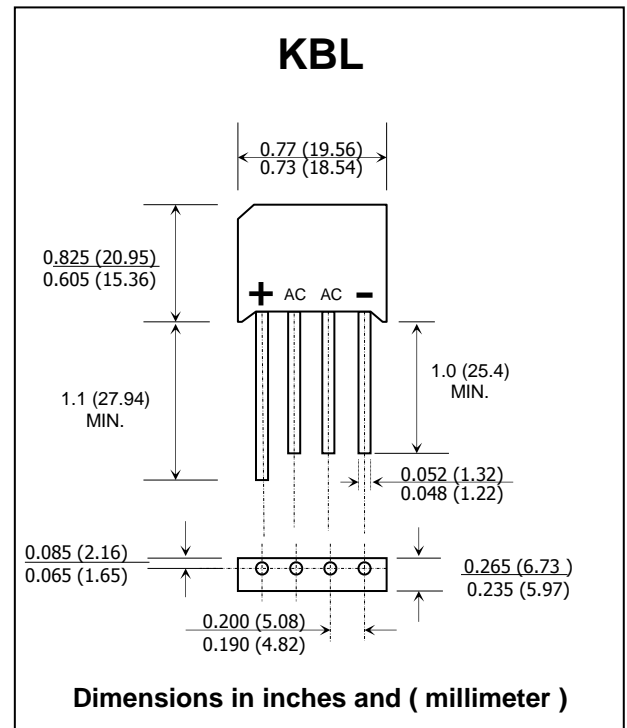
FEATURES :

- * Glass passivated chip
- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Ideal for printed circuit board
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : Molded plastic
- * Epoxy : UL94V-0 rate flame retardant
- * Terminals : Plated lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Polarity symbols marked on case
- * Mounting position : Any
- * Weight : 5.15 grams

GLASS PASSIVATED BRIDGE RECTIFIERS



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%.

RATING	SYMBOL	KBL 400	KBL 401	KBL 402	KBL 404	KBL 406	KBL 408	KBL 410	UNIT
Maximum Recurrent 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 Current $T_a=50^{\circ}C$	$I_{F(AV)}$	4.0							A
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	150							A
Maximum Forward Voltage per Diode at $I_F = 4 A$	V_F	1.1							V
Maximum DC Reverse Current $T_a = 25^{\circ}C$ at Rated DC Blocking Voltage $T_a = 100^{\circ}C$	I_R	10							μA
	$I_{R(H)}$	1.0							mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	19							$^{\circ}C/W$
Operating Junction Temperature Range	T_J	- 50 to + 150							$^{\circ}C$
Storage Temperature Range	T_{STG}	- 50 to + 150							$^{\circ}C$

Note :

- 1) Thermal resistance from Junction to Ambient with units mounted on a 3" X 3" X 0.11" THK (7.5cm X 7.5cm X 0.3cm) Cu. plate.

RATING AND CHARACTERISTIC CURVES (KBL400 - KBL410)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

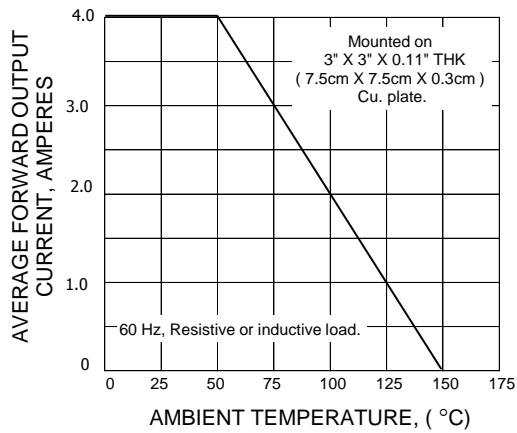


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

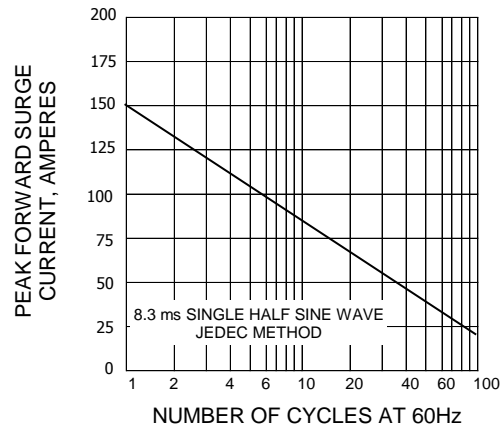


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

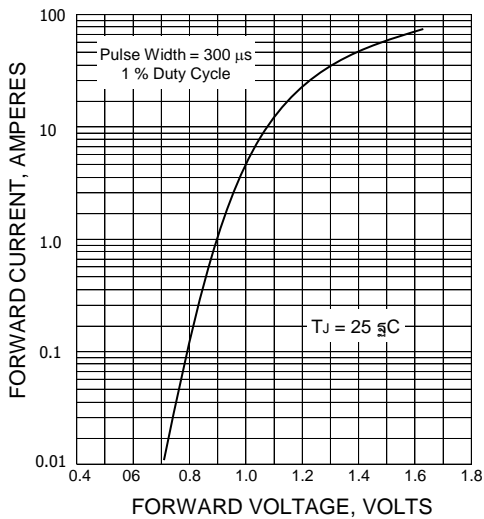


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

