

KBL400 - KBL410

PRV : 50 - 1000 Volts
Io : 4.0 Amperes

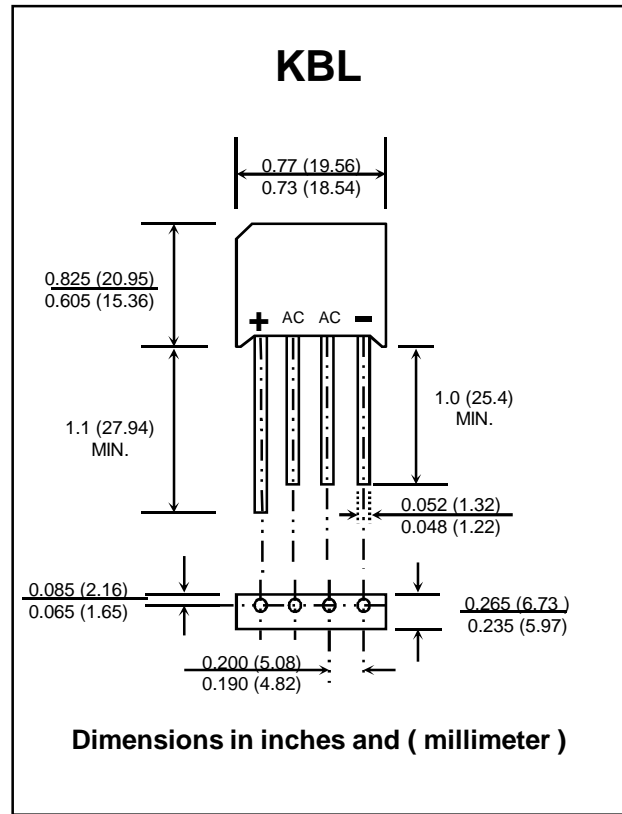
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Rated isolation-voltage 2000 V_{AC}
- * 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

SILICON 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 _c =50°C	I _{F(AV)}					4.0				A
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}					200				A
Rating for fusing (t < 8.3 ms.)	I ² t					166				A ² S
Maximum Forward Voltage per Diode at I _F = 4 A	V _F					1.1				V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C	I _R					10				µA
	I _{R(H)}					1.0				mA
Typical Thermal Resistance (Note 1)	R _{θJA}					10				°C/W
Operating Junction Temperature Range	T _J					- 50 to + 150			°C	
Storage Temperature Range	T _{STG}					- 50 to + 150			°C	

Notes :

(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

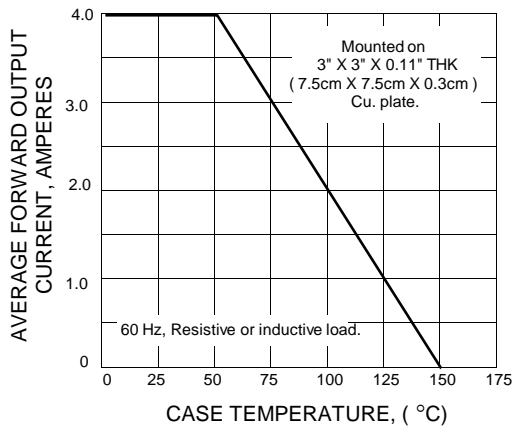


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

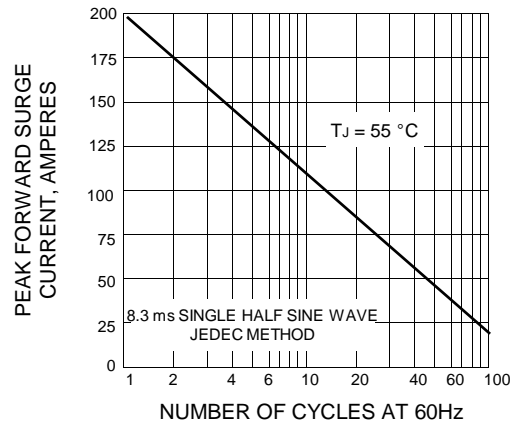


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

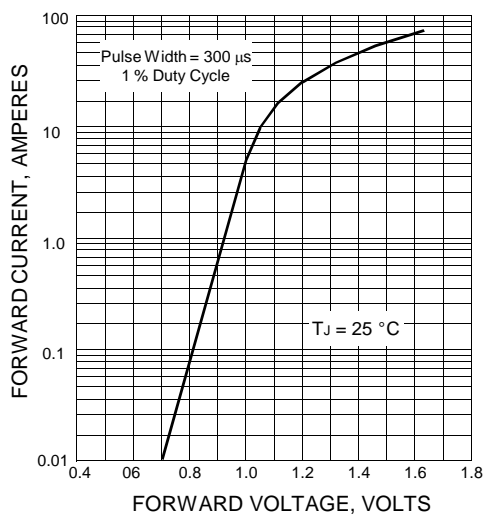


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

