

AKBL400 - AKBL410

AVALANCHE BRIDGE RECTIFIERS

PRV : 50 - 1000 Volts

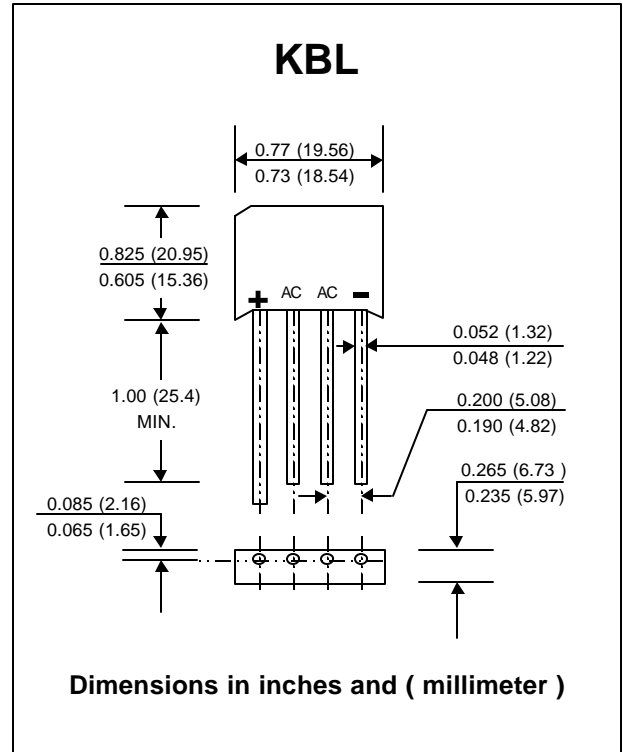
I_o : 4.0 Amperes

FEATURES :

- * High case dielectric strength
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Ideal for printed circuit board

MECHANICAL DATA :

- * Case : Reliable low cost construction utilizing molded plastic technique
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL - STD 202 , Method 208 guaranteed
- * Polarity : Polarity symbols marked on case
- * Mounting position : Any
- * Weight : 5.15 grams



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	AKBL 400	AKBL 401	AKBL 402	AKBL 404	AKBL 406	AKBL 408	AKBL 410	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Minimum Avalanche Breakdown Voltage at 100 μA	V _{BO(min.)}	100	150	250	450	700	900	1100	Volts
Maximum Avalanche Breakdown Voltage at 100 μA	V _{BO(max.)}	550	600	700	900	1150	1350	1550	Volts
Maximum Average Forward Current T _c = 50°C	I _{F(AV)}	4.0							Amp.
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	200							Amps.
Rating for fusing at (t < 8.3 ms.)	I ² t	166							A ² S
Maximum Forward Voltage per Diode at I _F = 4.0 Amperes.	V _F	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _a = 25 °C	10							μA
	T _a = 100 °C	1.0							mA
Typical Thermal Resistance (Note1)	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" (7.5 x 7.5 x 0.3 cm) Cu. plate.

RATING AND CHARACTERISTIC CURVES (AKBL400 - AKBL410)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

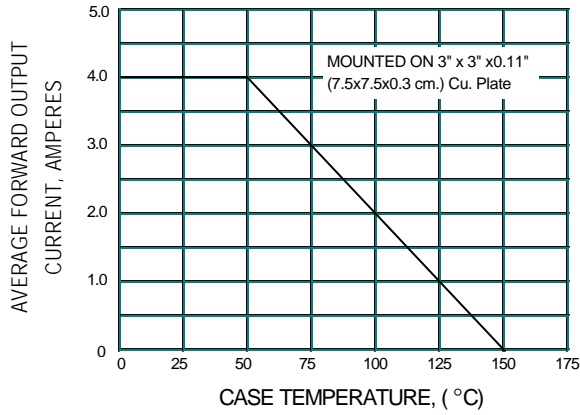


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

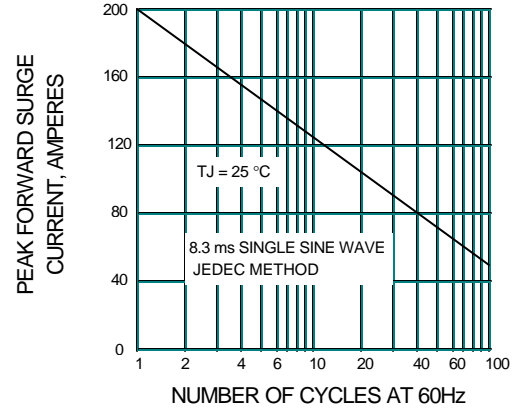


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

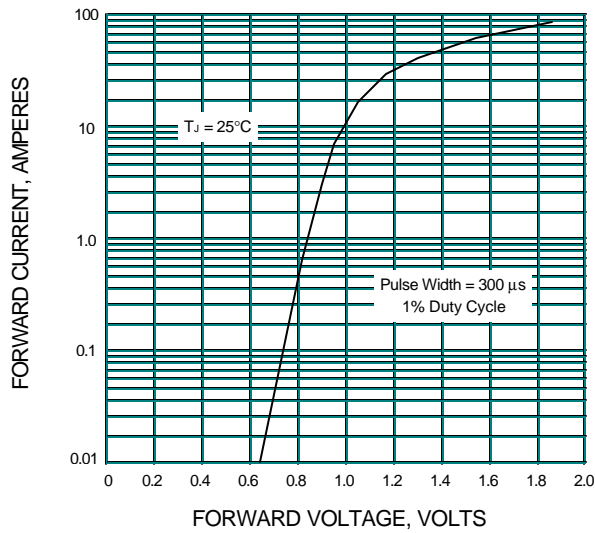


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

