

AKBL400 - AKBL410

AVALANCHE BRIDGE RECTIFIERS

PRV : 50 - 1000 Volts

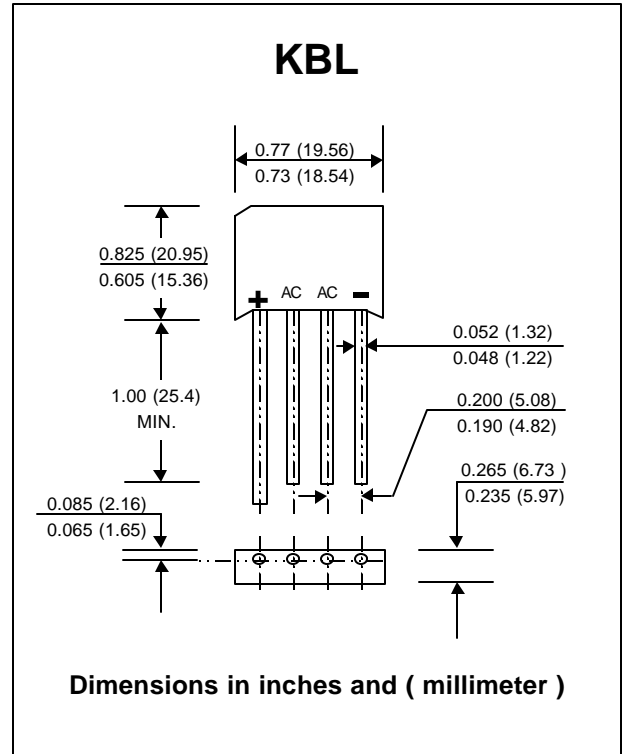
Io : 4.0 Amperes

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 μ A	$V_{BO(min)}$	100	150	250	450	700	900	1100	Volts
Maximum Avalanche Breakdown Voltage at 100 μ A	$V_{BO(max)}$	550	600	700	900	1150	1350	1550	Volts
Maximum Average Forward Current $T_c = 50^\circ C$	$I_{F(AV)}$	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^2t	166							A^2S
Maximum Forward Voltage per Diode at $I_F = 4.0$ Amperes.	V_F	1.1							Volts
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 (Note1)	$R_{\theta JA}$	10							$^\circ C/W$
Operating Junction Temperature Range	T_J	- 50 to + 150							$^\circ C$
Storage Temperature Range	T_{STG}	- 50 to + 150							$^\circ C$

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

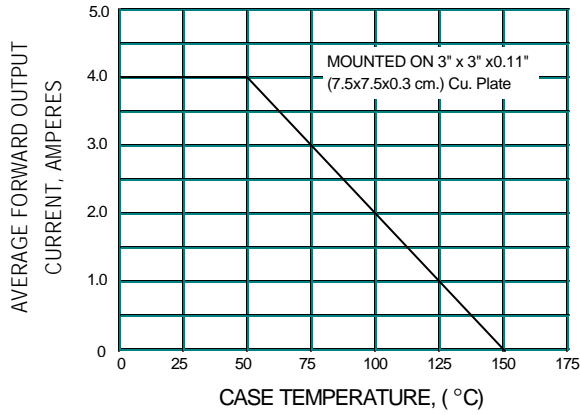


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

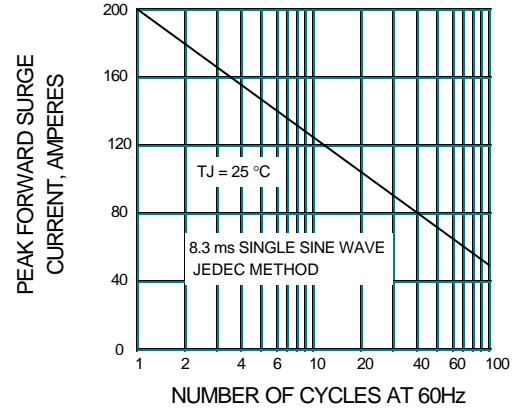


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

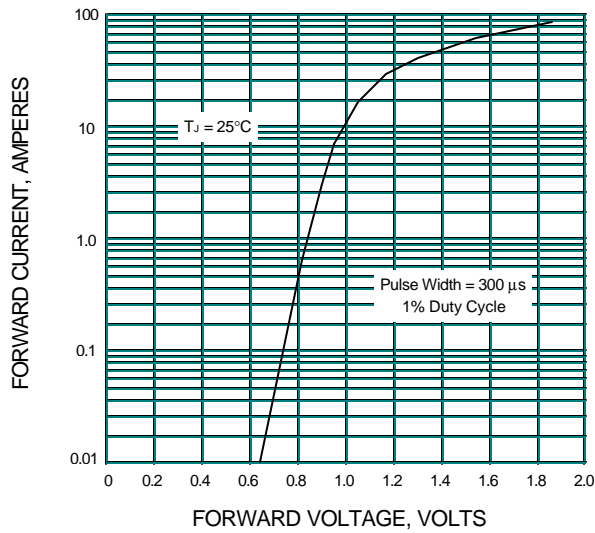


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

