

ABR800 - ABR810

PRV : 50 - 1000 Volts

Io : 8.0 Amperes

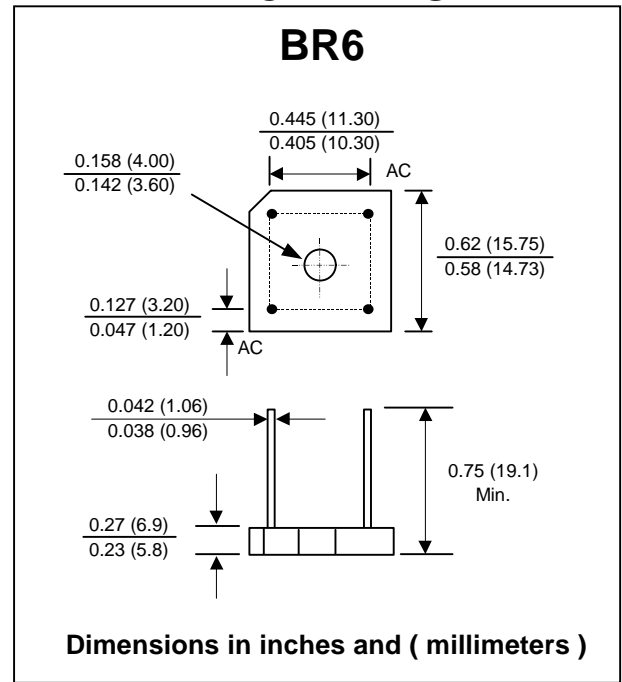
FEATURES :

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

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 : 6.1 grams

AVALANCHE 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	ABR 800	ABR 801	ABR 802	ABR 804	ABR 806	ABR 808	ABR 810	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
Minimum Avalanche Breakdown Voltage at 100 μA	V _{BO(min.)}	100	150	250	450	700	900	1100	V
Maximum Avalanche Breakdown Voltage at 100 μA	V _{BO(max.)}	550	600	700	900	1150	1350	1550	V
Maximum Average Forward Current Tc = 50°C	I _{F(AV)}	8.0							A
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	300							A
Rating for fusing at (t < 8.3 ms.)	I ² t	160							A ² S
Maximum Forward Voltage per Diode at I _F = 4.0 A	V _F	1.0							V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C	I _R	10							μA
	I _{R(H)}	10.0							mA
Typical Thermal Resistance (Note 1)	RθJC	2.5							°C/W
Operating Junction Temperature Range	T _J	- 50 to + 150							°C
Storage Temperature Range	T _{STG}	- 50 to + 150							°C

Note :

1) Thermal resistance from Junction to case with units mounted on a 3.2" x 3.2" x 0.12" (8.2 x 8.2 x 0.3 cm) Al. plate. heatsink.

RATING AND CHARACTERISTIC CURVES (ABR800 - ABR810)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

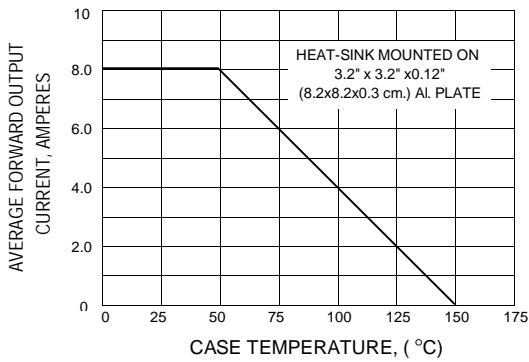


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

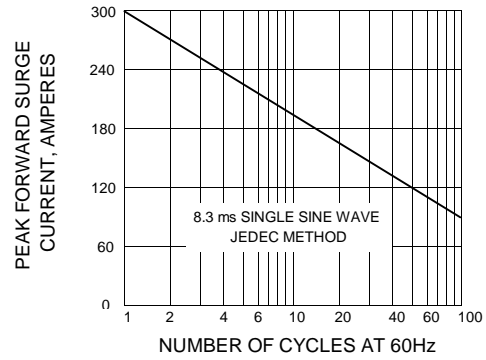


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

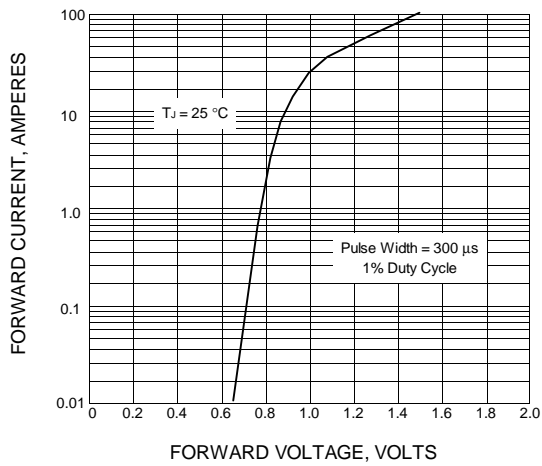


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

