

AKBP200 - AKBP210

AVALANCHE BRIDGE RECTIFIERS

PRV : 50 - 1000 Volts

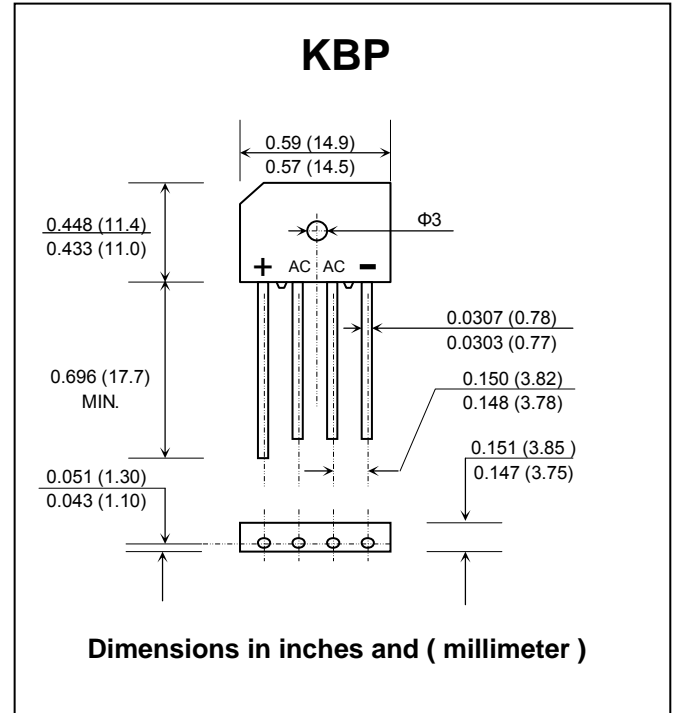
Io : 2.0 Amperes

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 : 3.4 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 | AKBP 200 | AKBP 201 | AKBP 202 | AKBP 204 | AKBP 206 | AKBP 208 | AKBP 210 | 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 T _c = 50°C | I _{F(AV)} | 2.0 | | | | | | | A |
| Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method) | I _{FSM} | 50 | | | | | | | A |
| Rating for fusing at (t < 8.3 ms.) | I ² t | 10 | | | | | | | A ² S |
| Maximum Forward Voltage per Diode at I _F = 1.0 A | V _F | 1.0 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | T _a = 25 °C | I _R | | | | | | | μA |
| | T _a = 100 °C | I _{R(H)} | | | | | | | mA |
| Typical Thermal Resistance (Note1) | R _{θJA} | 36 | | | | | | | °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 3" x 3" x 0.11" (7.5 x 7.5 x 0.3 cm) Cu. plate.

RATING AND CHARACTERISTIC CURVES (AKBP200 - AKBP210)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

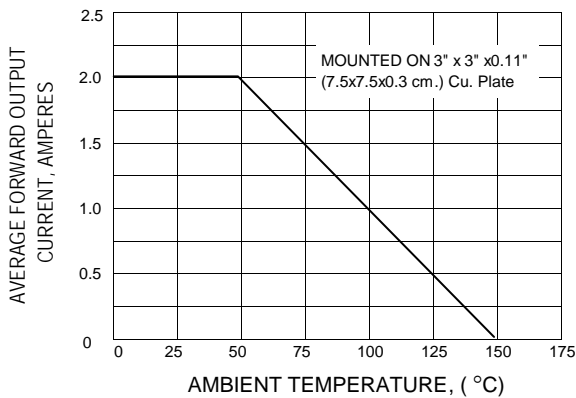


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

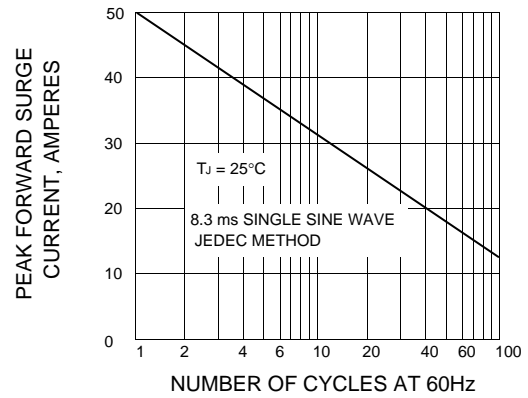


FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

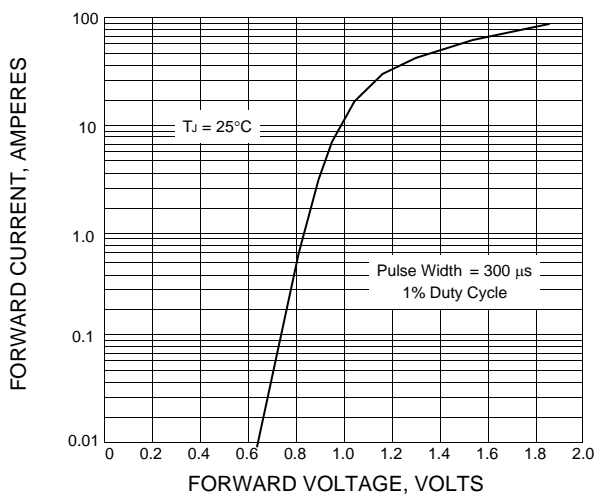


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

