

FKBP200 - FKBP210

PRV : 50 - 1000 Volts
Io : 2.0 Amperes

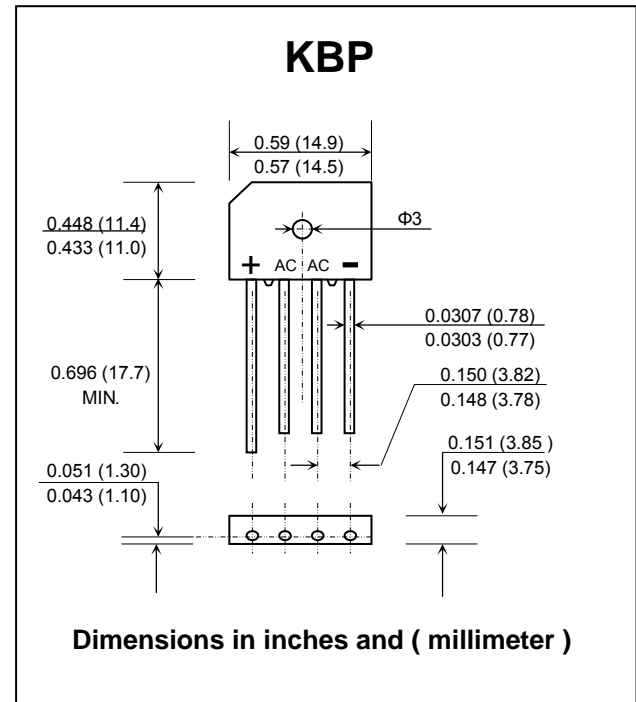
FEATURES :

- * High case dielectric strength of 2000 V_{DC}
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * 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 : 3.4 grams

FAST RECOVERY 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 | FKBP 200 | FKBP 201 | FKBP 202 | FKBP 204 | FKBP 206 | FKBP 208 | FKBP 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 |
| 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} | 35 | | | | | | | A |
| Current Squared Time at t < 8.3 ms. | I ² t | 10 | | | | | | | A ² S |
| Maximum Forward Voltage drop per Diode at I _F = 1.0 A | V _F | 1.3 | | | | | | | V |
| Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100 °C | I _R | 10 | | | | | | | μA |
| | I _{R(H)} | 500 | | | | | | | μA |
| Maximum Reverse Recovery Time (Note 1) | T _{rr} | 150 | | | 250 | | 500 | | ns |
| Typical Thermal Resistance (Note 2) | R _{θJA} | 30 | | | | | | | °C/W |
| Operating Junction Temperature Range | T _J | - 50 to + 150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | - 50 to + 150 | | | | | | | °C |

Notes :

- 1) Measured with F = 0.5 Amp., I_R = 1 Amp., I_{rr} = 0.25 Amp.
- 2) Thermal resistance from Junction to Ambient on P.C. Board with, 0.47" X 0.47" (12 mm. x 12 mm.) Cu. pads.

RATING AND CHARACTERISTIC CURVES (FKBP200 - FKBP210)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

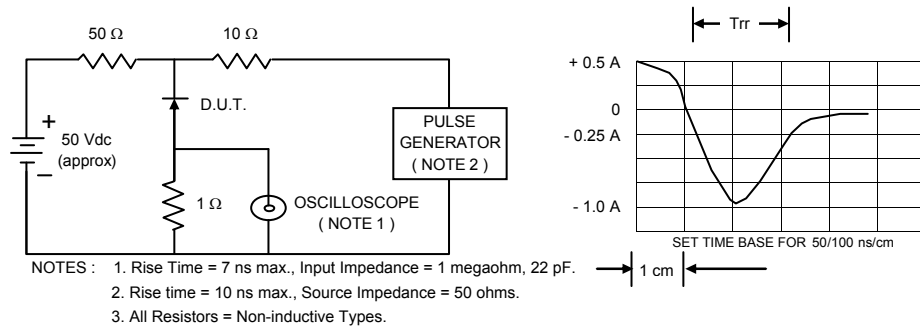


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

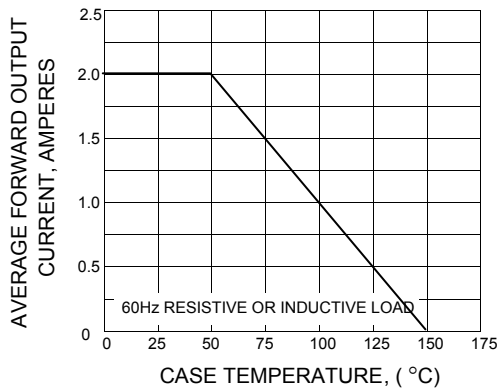


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

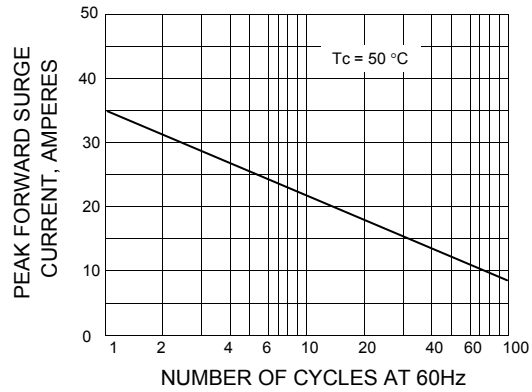


FIG.4 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

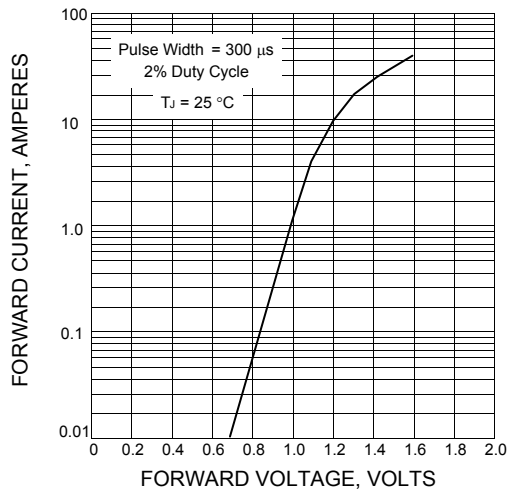


FIG.5 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

