

FKBP200 - FKBP210

PRV : 50 - 1000 Volts
Io : 2.0 Amperes

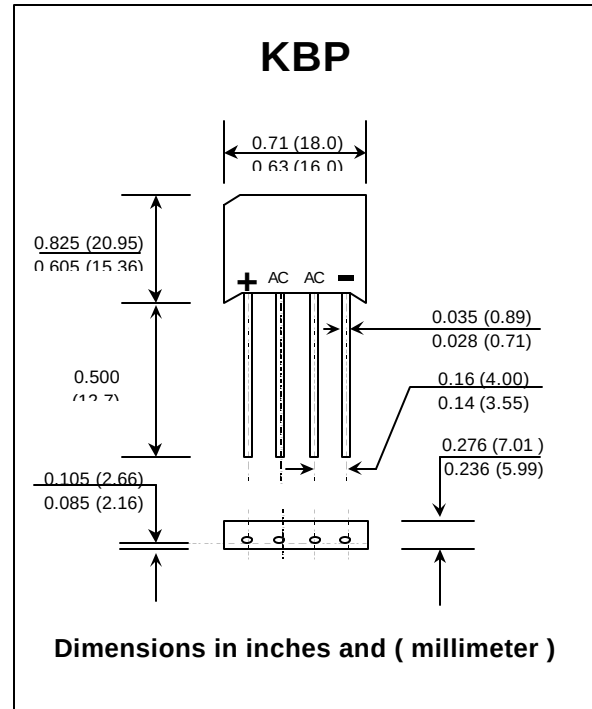
FEATURES :

- * 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

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

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	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
Maximum Average Forward Current Tc = 50 °C	I _{F(AV)}	2.0							Amps.
Peak Forward Surge Current Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	35							Amps.
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 Am	V _F	1.3							Volts
Maximum DC Reverse Current Ta = 25 °C	I _R	10							μA
at Rated DC Blocking Voltage Ta = 100 °C	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 I_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.

UPDATE : APRIL 21, 1998

RATING AND CHARACTERISTIC CURVES (FKBP200 - FKBP210)

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

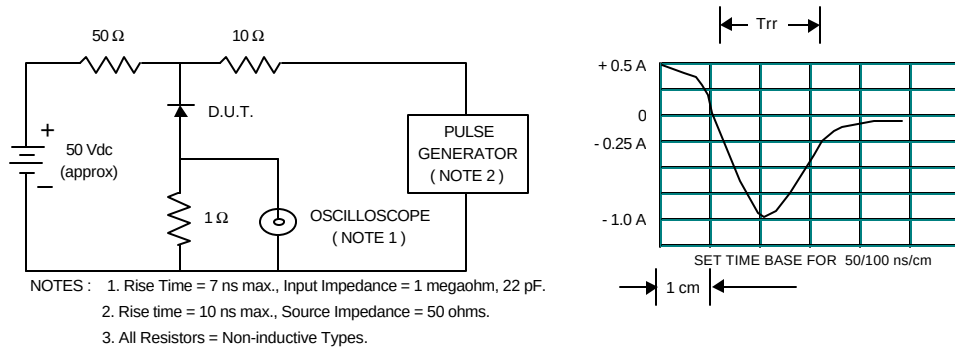


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

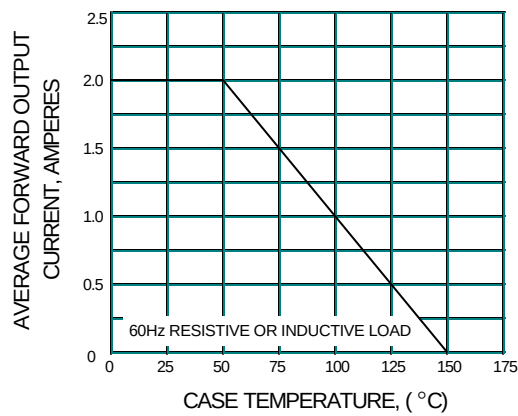


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

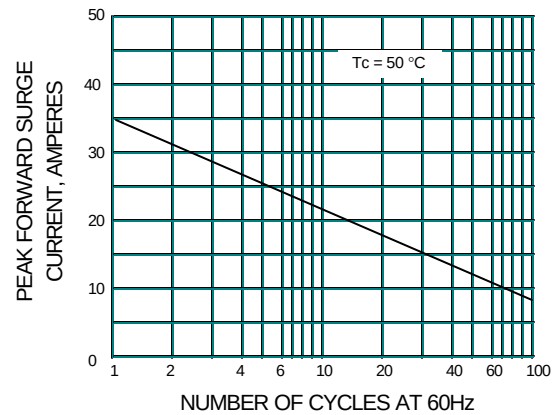


FIG.4 - TYPICAL FORWARD CHARACTERISTICS PER DIODE

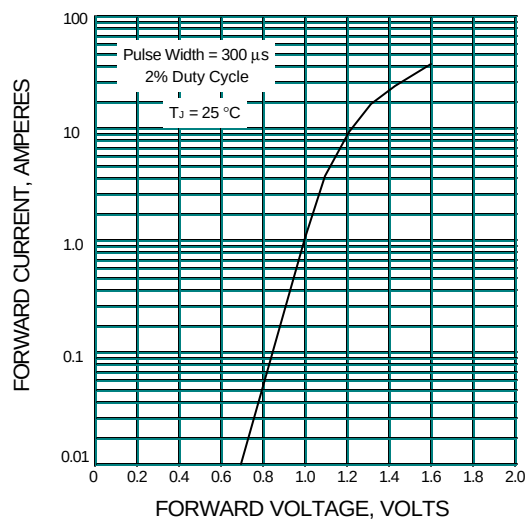


FIG.5 - TYPICAL REVERSE CHARACTERISTICS PER DIODE

