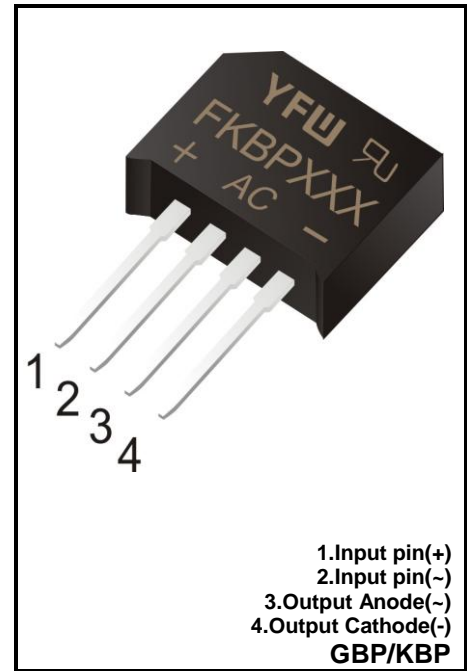


2.0A ULTRASOFT RECOVERY BRIDGE RECTIFIER Reverse Voltage –1000 V Forward Current – 2.0A

FEATURES

- ◆Ultrasoft recovery
- ◆LOW I_{RRM} , LOW V_F , LOW V_{RRM}
- ◆Glass Passivated Chip Junction
- ◆Special frame design for heat dissipation
- ◆Lead free in comply with EU RoHS 2011/65/EU directives



BENEFITS

- ◆Reduced EMI
- ◆Reduced Power loss and switching transistor
- ◆Reduced snubbing

MECHANICAL DATA

- ◆Case: GBP/KBP
- ◆Terminals: Solderable per MIL-STD-750, Method 2026

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

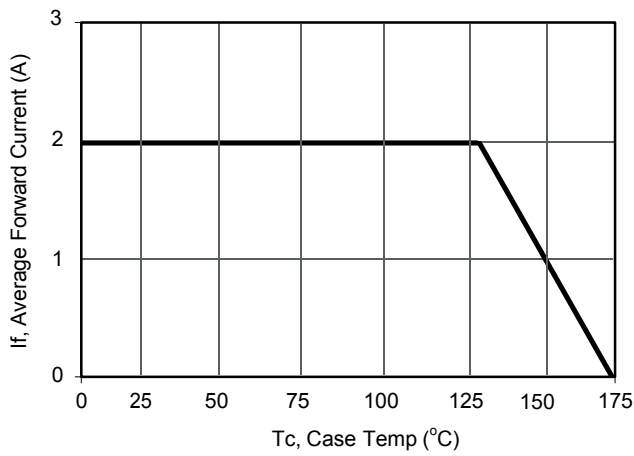
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

| Parameter | Symbols | FKBP210 | Units |
|--|----------------|------------|------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 700 | V |
| Maximum DC Blocking Voltage | V_{DC} | 1000 | V |
| Average Rectified Output Current | I_o | 2.0 | A |
| Reverse Recovery Time. $I_F=0.5A, I_R=1A, I_{RR}=0.25A$ | T_{rr} | 10 | uS |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method) | I_{FSM} | 55 | A |
| I^2t Rating for Fusing($1ms \leq t \leq 10ms$) | I^2t | 15 | A ² S |
| Maximum Forward Voltage at 1.0 A | V_F | 1.0 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 5 100 | uA |
| Typical Junction Capacitance (Note1) | C_j | 40 | pF |
| Operating and Storage Temperature Range | T_j, T_{stg} | -55 ~ +175 | °C |

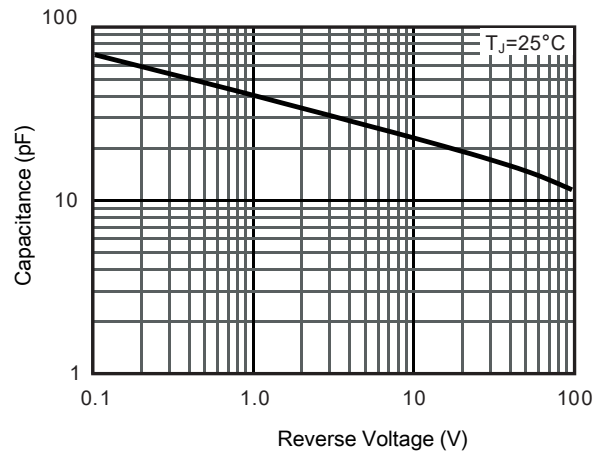
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

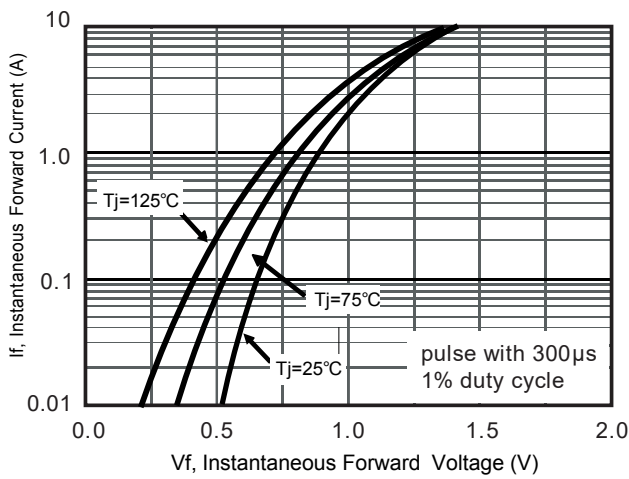
RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



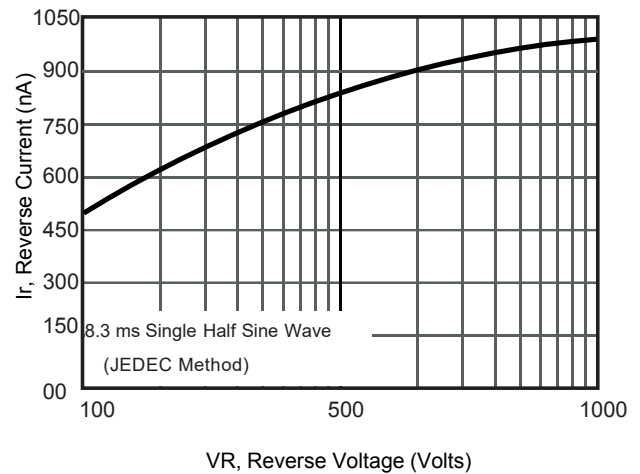
Current Derating, Case



Typical Junction Capacitance



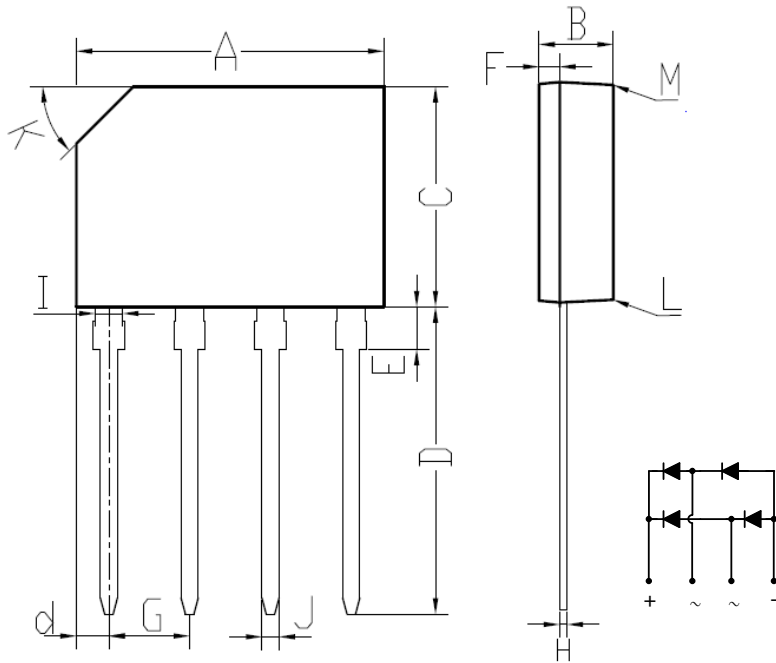
Typical Forward Voltage



Typical Reverse Current

Package Outline

KBP



| KBP | | |
|------------------------------|-----------------|-------|
| DIM. | MIN. | MAX. |
| A | 14.25 | 14.75 |
| B | 3.35 | 3.65 |
| C | 10.20 | 10.60 |
| D | 14.25 | 14.73 |
| d | 1.40 | 1.70 |
| E | 1.80 | 2.20 |
| F | 0.80 | 1.10 |
| G | 3.56 | 4.06 |
| H | 0.35 | 0.55 |
| I | 1.22 | 1.42 |
| J | 0.76 | 0.86 |
| K | 2.7 x 45° (Typ) | |
| L | # | 3° |
| M | # | 2° |
| All Dimensions in millimeter | | |

Summary of Packing Options

| Package | Packing Description | Packing Quantity | Industry Standard |
|---------|---------------------|------------------|-------------------|
| KBP | BOX | 500 | EIA-481-1 |