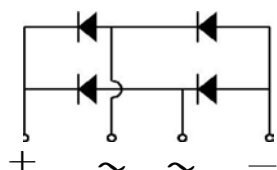


## Glass Passivated Bridge Rectifiers



### Features

- Compliant with RoHS Provisions
- Low forward voltage, high forward current
- High forward surge current capability
- High heat-conducting performance
- Thermal welding performance:  
260 °C/10sec

### Applications

- Switching Power Supply
- Home Appliances, Office Devices
- Industrial Auto-equipments

### 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 %.

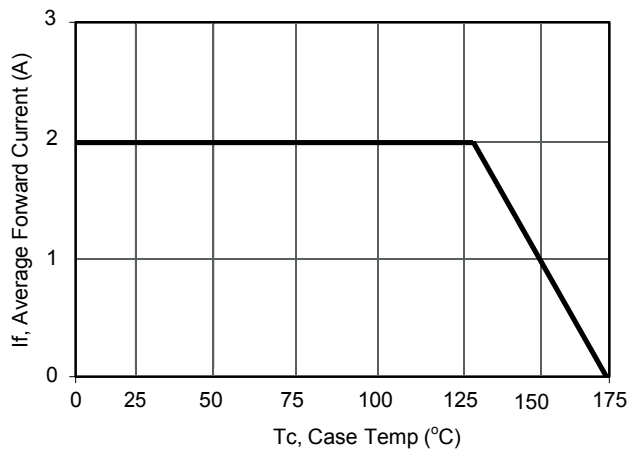
| Parameter                                                                                         | Symbols                                | KBP206     | Units            |
|---------------------------------------------------------------------------------------------------|----------------------------------------|------------|------------------|
| Maximum Repetitive Peak Reverse Voltage                                                           | VRRM                                   | 600        | V                |
| Maximum RMS voltage                                                                               | VRMS                                   | 420        | V                |
| Maximum DC Blocking Voltage                                                                       | VDC                                    | 600        | V                |
| Average Rectified Output Current                                                                  | I <sub>o</sub>                         | 2.0        | A                |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | IFSM                                   | 60         | A                |
| I <sup>2</sup> t rating for fusing ( 1ms< t < 8.3ms)                                              | I <sup>2</sup> t                       | 15         | A <sup>2</sup> S |
| Maximum Forward Voltage at 1.0 A                                                                  | V <sub>F</sub>                         | 1.1        | V                |
| Maximum DC Reverse Current @TA=25 °C<br>at Rated DC Blocking Voltage @TA=125 °C                   | I <sub>R</sub>                         | 5<br>500   | μA               |
| Typical Junction Capacitance (Note1)                                                              | C <sub>j</sub>                         | 25         | pF               |
| Operating and Storage Temperature Range                                                           | T <sub>j</sub> , T <sub>stg</sub>      | -55 ~ +150 | °C               |
| Typical thermal resistance (Note 2)                                                               | R <sub>thJA</sub><br>R <sub>thJC</sub> | 40<br>15   | °C/W             |

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

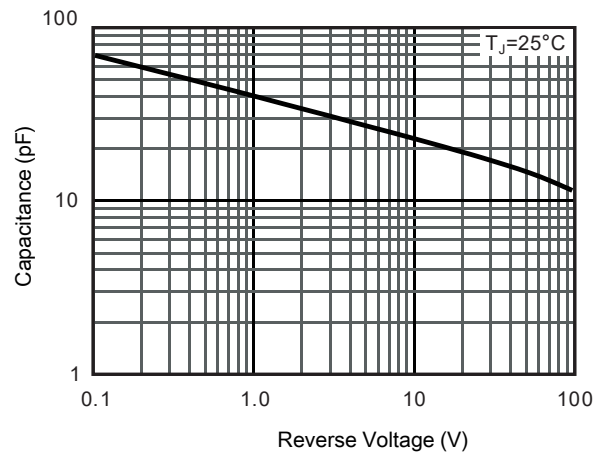
2. Thermal resistance junction to case, lead and ambient in accordance with JESD-51.

Unit mounted on glass-epoxy substrate with 1oz/ft<sup>2</sup> 20x20 mm copper pad per pin with heatsink

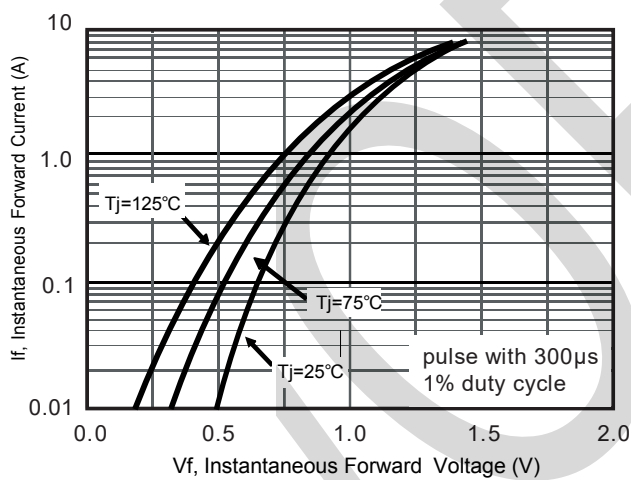
## RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)



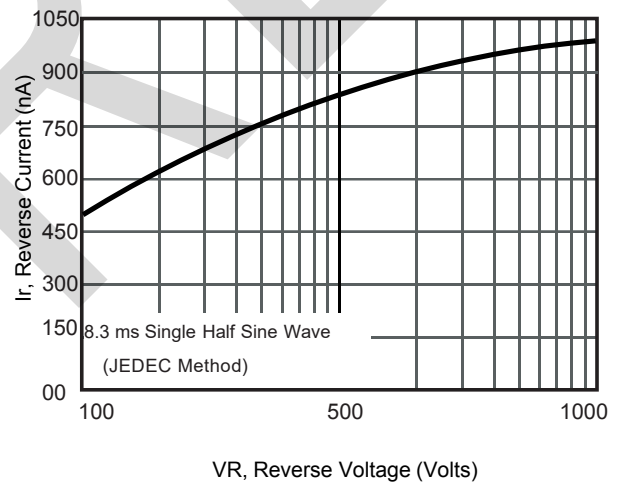
Current Derating, Case



Typical Junction Capacitance



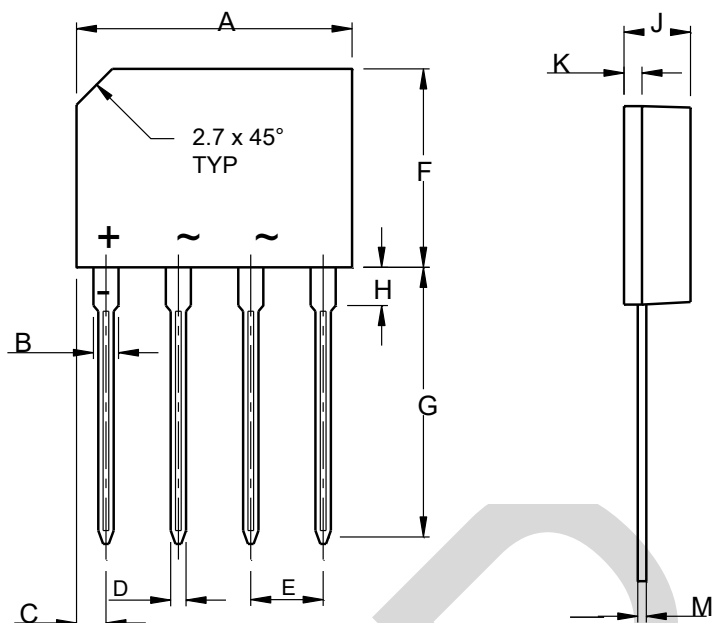
Typical Forward Voltage



Typical Reverse Current

## PACKAGE OUTLINE DIMENSIONS

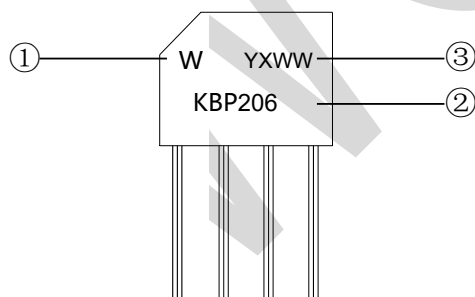
## Outline Dimensions



### KBP mechanical data

| UNIT |     | A     | B    | C    | D    | E     | F     | G     | H    | J     | K    | M    |
|------|-----|-------|------|------|------|-------|-------|-------|------|-------|------|------|
| mm   | max | 13.8  | 1.2  | 1.3  | 0.7  | 3.5   | 10.2  | 13.8  | 1.8  | 2.8   | 0.8  | 0.3  |
|      | min | 14.5  | 1.5  | 1.8  | 0.9  | 4.1   | 10.6  | 14.5  | 2.2  | 3.3   | 1.1  | 0.6  |
| mil  | max | 543.3 | 47.2 | 51.2 | 27.5 | 137.8 | 401.5 | 543.3 | 70.8 | 110.2 | 31.5 | 11.8 |
|      | min | 570.8 | 59.1 | 70.9 | 35.4 | 161.4 | 417.3 | 570.8 | 86.6 | 129.9 | 43.3 | 23.6 |

### Marking Information



①W: Company's trademark

②Product model : KBP206

③PDC information:

Y X WW H

Y: Year code(ex:0=2020)  
X: Internal identification code  
WW: Week code(01 to 53)  
H: Halogen-free