

**4.0A GLASS PASSIVATED BRIDGE RECTIFIER**

**Reverse Voltage - 100 to 1000 V**

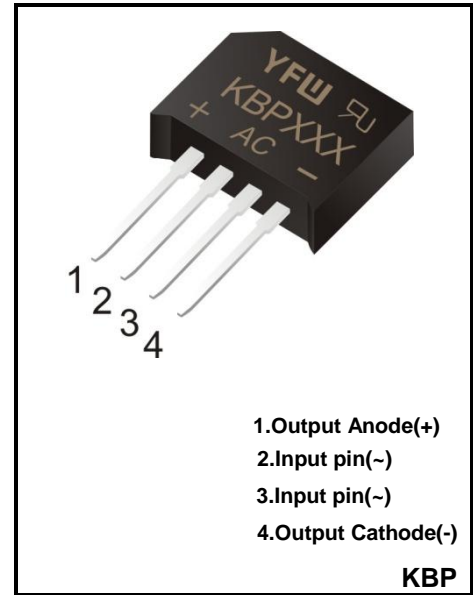
**Forward Current – 4.0A**

**FEATURES**

- ◆High current capability
- ◆Low forward voltage drop
- ◆Glass Passivated Chip Junction
- ◆Low power loss, high efficiency
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

- ◆Case: KBP
- ◆Terminals: Solderable per MIL-STD-202, Method 208
- ◆Approx. Weight: 1.52g / 0.05oz



**Maximum Ratings and Electrical characteristics**

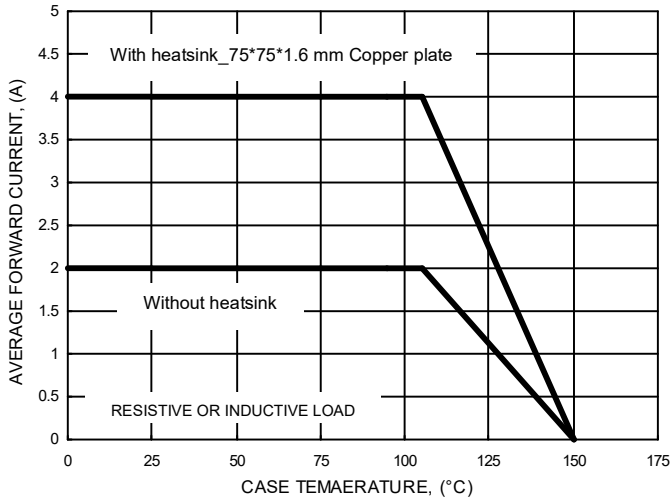
Ratings at 25 °C ambient temperature unless otherwise specified.

| Parameter                                                                                                                         | Symbols                        | KBP401     | KBP402 | KBP404 | KBP406 | KBP408 | KBP410 | Units              |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------|--------|--------|--------|--------|--------|--------------------|
| Maximum Repetitive Peak Reverse Voltage                                                                                           | $V_{RRM}$                      | 100        | 200    | 400    | 600    | 800    | 1000   | V                  |
| Maximum RMS voltage                                                                                                               | $V_{RMS}$                      | 70         | 140    | 280    | 420    | 560    | 700    | V                  |
| Maximum DC Blocking Voltage                                                                                                       | $V_{DC}$                       | 100        | 200    | 400    | 600    | 800    | 1000   | V                  |
| Average Rectified Output Current                                                                                                  | $I_{(AV)}$                     | 4          |        |        |        |        |        | A                  |
| Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)                                 | $I_{FSM}$                      | 95         |        |        |        |        |        | A                  |
| Peak Forward Surge Current @ $T_j = 25\text{ }^\circ\text{C}$<br>1.0ms single half sine-wave                                      | $I_{FSM}$                      | 150        |        |        |        |        |        | A                  |
| Forward Voltage per element @ $I_F = 4.0\text{A}$ and $25\text{ }^\circ\text{C}$                                                  | $V_F$                          | 1.1        |        |        |        |        |        | V                  |
| Maximum DC Reverse Current @ $T_j = 25\text{ }^\circ\text{C}$<br>at Rated DC Blocking Voltage @ $T_j = 125\text{ }^\circ\text{C}$ | $I_R$                          | 5<br>500   |        |        |        |        |        | $\mu\text{A}$      |
| I <sup>2</sup> t Rating for Fusing(3ms≤t≤8.3ms)                                                                                   | $I^2t$                         | 26.5       |        |        |        |        |        | A <sup>2</sup> S   |
| Typical Junction Capacitance <sup>(Note1)</sup>                                                                                   | $C_j$                          | 50         |        |        |        |        |        | pF                 |
| Typical Thermal Resistance <sup>(Note2)</sup>                                                                                     | $R_{\theta JA}/ R_{\theta JC}$ | 30/10      |        |        |        |        |        | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range                                                                                           | $T_j, T_{stg}$                 | -55 ~ +150 |        |        |        |        |        | $^\circ\text{C}$   |

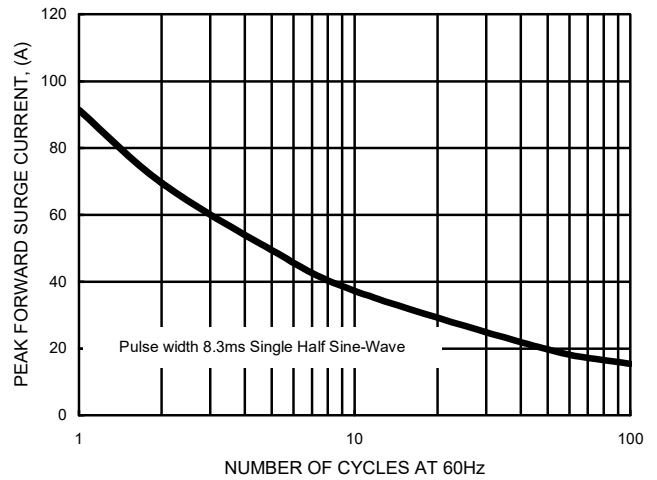
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Thermal Resistance Junction to Case, Lead and Ambient.

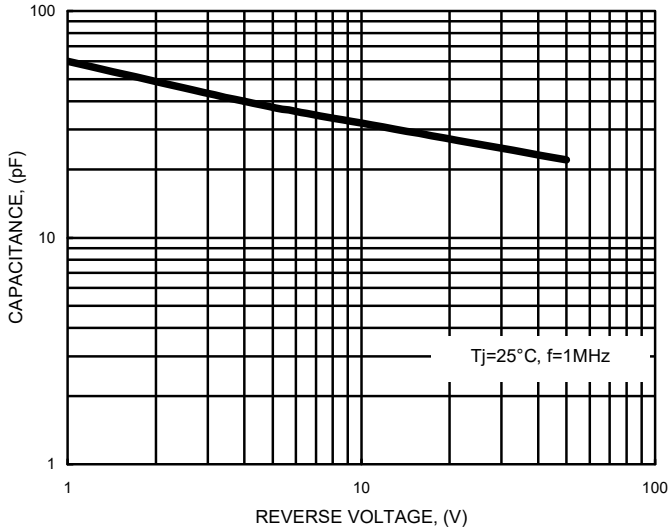
**FIG.1- FORWARD CURRENT DERATING CURVE**



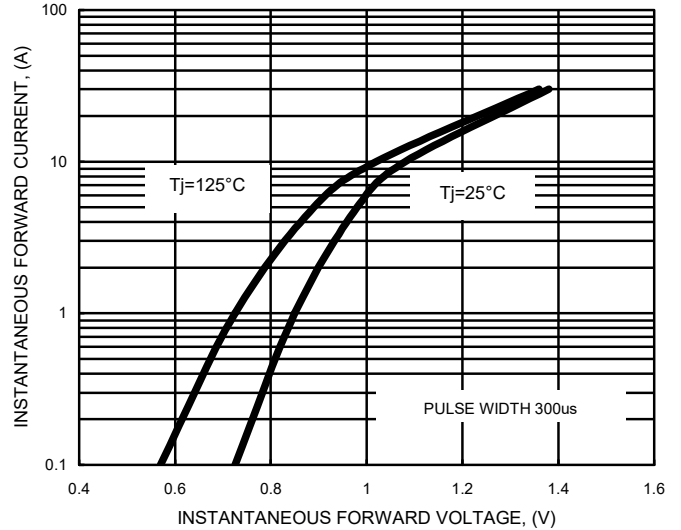
**FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



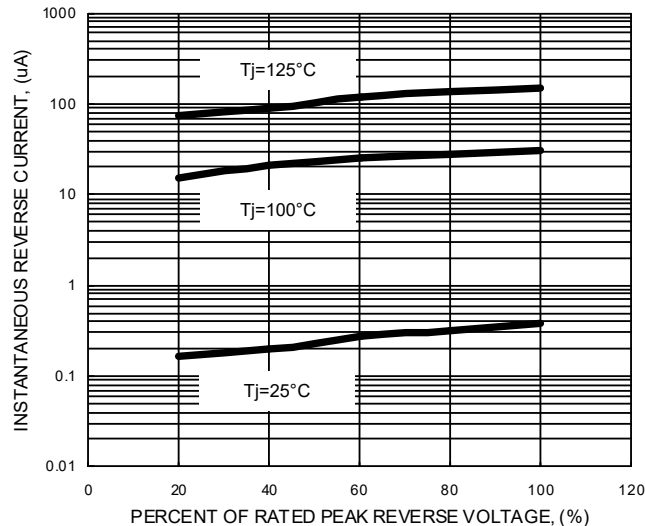
**FIG.3- TYPICAL JUNCTION CAPACITANCE**



**FIG.4- TYPICAL FORWARD CHARACTERISTICS**

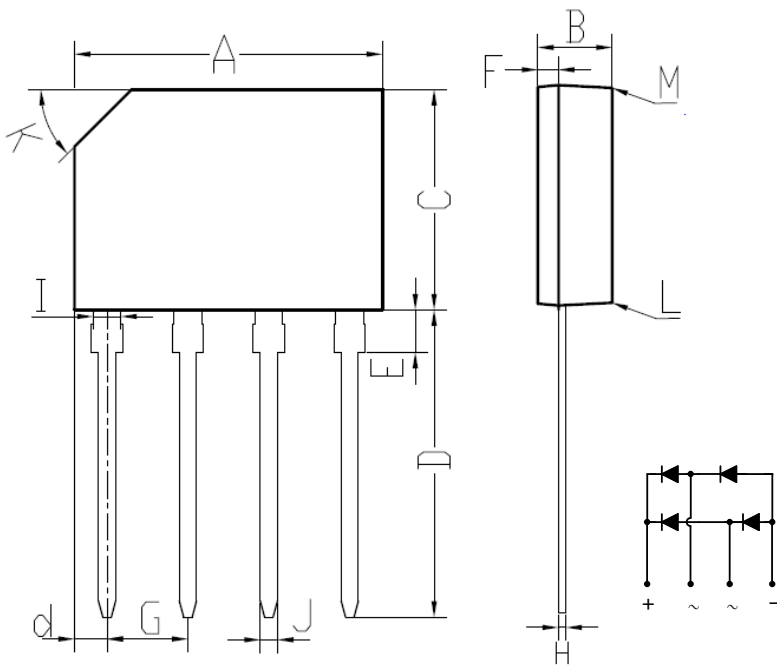


**FIG.5- TYPICAL REVERSE CHARACTERISTICS**



**Package Outline**

**KBP**



| KBP                          |              |       |
|------------------------------|--------------|-------|
| DIM.                         | MIN.         | MAX.  |
| A                            | 14.3         | 14.60 |
| B                            | 3            | 3.3   |
| c                            | 10.45        | 10.75 |
| D                            | 14.41        | 14.71 |
| d                            | 1.40         | 1.70  |
| E                            | 2.0          | 2.30  |
| F                            | 0.90         | 1.20  |
| G                            | 3.50         | 3.80  |
| H                            | 0.35         | 0.37  |
| I                            | 1.43         | 1.45  |
| J                            | 0.8          | 0.83  |
| K                            | 2.7x45°(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         |

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Bridge Rectifiers](#) category:*

*Click to view products by [YFW Electronics](#) manufacturer:*

Other Similar products are found below :

[MB252](#) [MB356G](#) [MB358G](#) [GBJ1504-BP](#) [GBU10B-BP](#) [GBU15K-BP](#) [GBU4A-BP](#) [GBU4D-BP](#) [DB101-BP](#) [DF01](#) [DF10SA-E345](#) [KBPC50-10S](#) [RS405GL-BP](#) [GBJ1502-BP](#) [GBU6M](#) [TB102M](#) [MB1510](#) [MB86](#) [TL401G](#) [MDA920A2](#) [TU602](#) [TU810](#) [MP5010W-BP](#) [MP501W-BP](#) [MP502-BP](#) [KBPC25-02](#) [VBO160-12NO7](#) [VS-110MT120KPBF](#) [VS-60MT80KPBF](#) [DB105-BP](#) [DF1510S](#) [VS-40MT160PAPBF](#) [GBU4G-BP](#) [GSIB15A80-E3/45](#) [DB104-BP](#) [D3SB60](#) [TB354](#) [GBJ2504-BP](#) [26MB100A](#) [B1S-G](#) [VS-40MT160KPBF](#) [VUO162-16NO7](#) [ABS10-G](#) [GBU6B-BP](#) [GBJ1508-BP](#) [BR5010-G](#) [ABS6-G](#) [B125C800G-E4/51](#) [MSB15MH-13](#) [LBS10-13](#)