

# KBPC15, 25, 35G/W SERIES

## 15, 25, 35A GLASS PASSIVATED BRIDGE RECTIFIER

### Features

- Glass Passivated Die Construction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Epoxy Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V

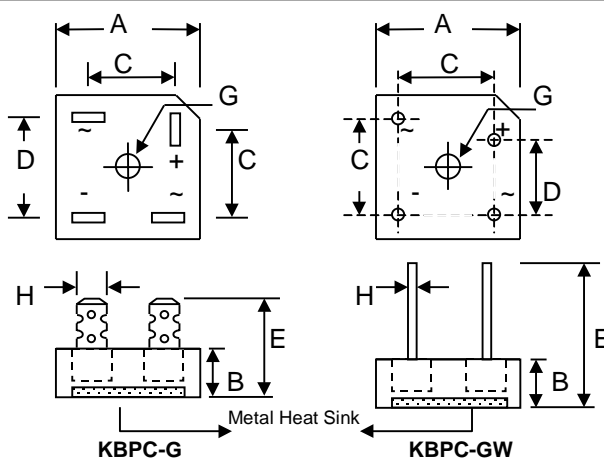
### Mechanical Data

- Case: Epoxy Case with Heat Sink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #10 Screw
- Weight: KBPC-G 24 grams (approx.)  
KBPC-GW 21 grams (approx.)
- Marking: Type Number

"W" Suffix Designates Wire Leads

No Suffix Designates Faston Terminals

\*All Models are Available on B(Height)=7.9mm Max. Epoxy Case



|                     | KBPC-G                            |       | KBPC-GW |       |
|---------------------|-----------------------------------|-------|---------|-------|
| Dim                 | Min                               | Max   | Min     | Max   |
| A                   | 28.40                             | 28.70 | 28.40   | 28.70 |
| B                   | 10.97                             | 11.23 | 10.97   | 11.23 |
| C                   | 15.70                             | 16.70 | 17.10   | 19.10 |
| D                   | 17.50                             | 18.50 | 10.90   | 11.90 |
| E                   | 22.86                             | 25.40 | 30.50   | —     |
| G                   | Hole for #10 screw, 5.08Ø Nominal |       |         |       |
| H                   | 6.35 Typical                      |       | 0.97Ø   | 1.07Ø |
| All Dimension in mm |                                   |       |         |       |

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

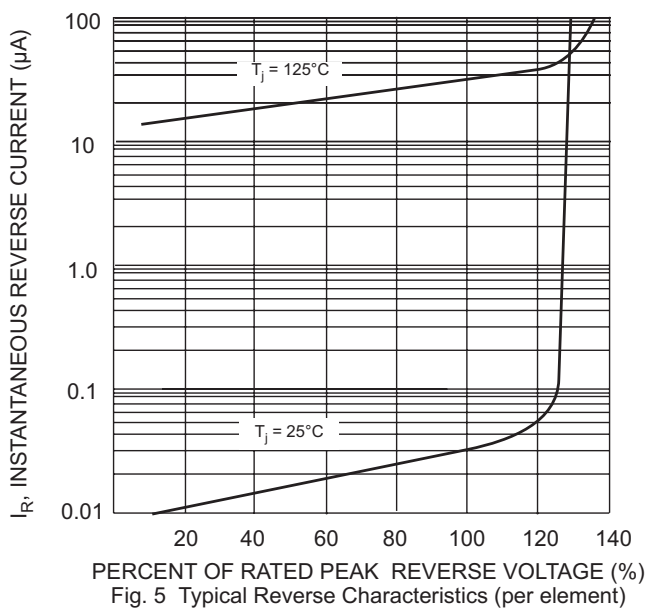
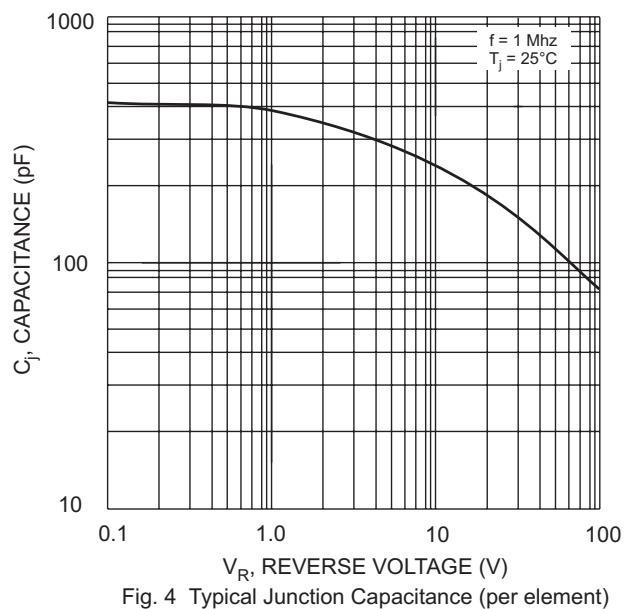
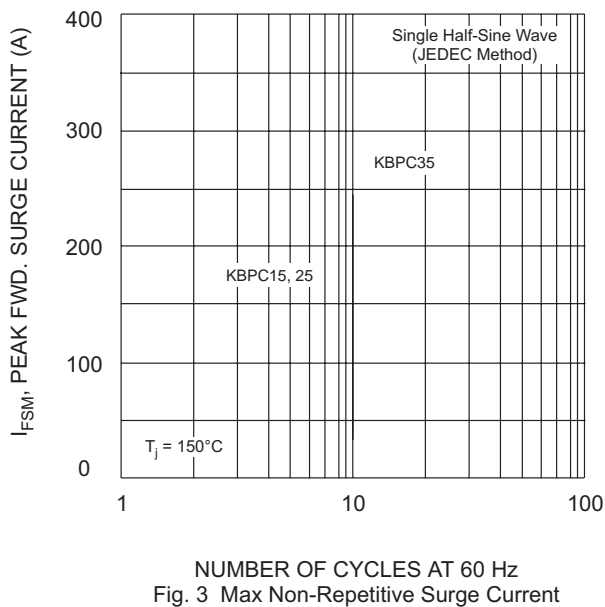
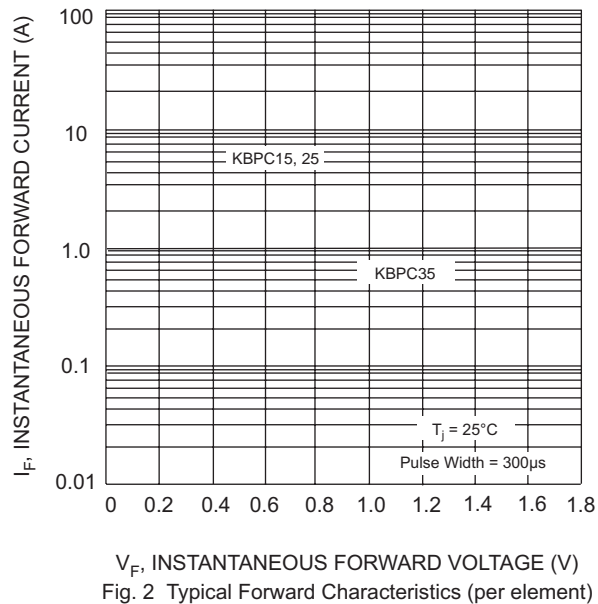
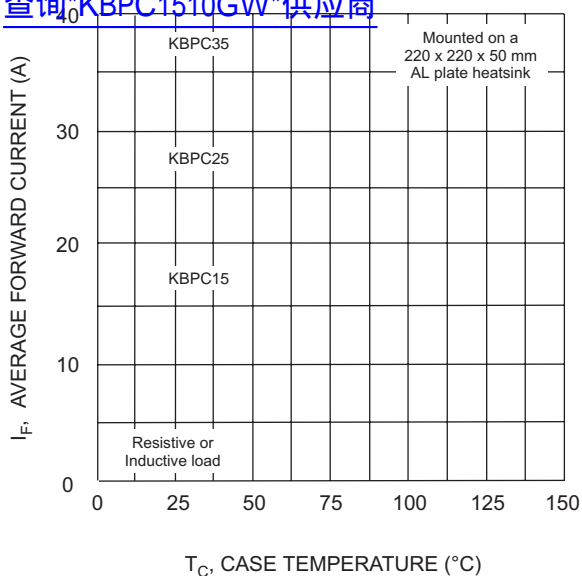
For capacitive load, derate current by 20%.

| Characteristics  | Symbol              | -00G/W   | -01G/W | -02G/W | -04G/W | -06G/W | -08G/W | -10G/W | Unit             |
|--|---------------------|--|--------|--------|--------|--------|--------|--------|------------------|
| Peak Repetitive Reverse Voltage  | V <sub>RRM</sub>    | 50   | 100    | 200    | 400    | 600    | 800    | 1000   | V                |
| Working Peak Reverse Voltage   | V <sub>RWM</sub>    |  |        |        |        |        |        |        |                  |
| DC Blocking Voltage  | V <sub>R</sub>      |  |        |        |        |        |        |        |                  |
| RMS Reverse Voltage  | V <sub>R(RMS)</sub> | 35   | 70     | 140    | 280    | 420    | 560    | 700    | V                |
| Average Rectifier Output Current<br>@T <sub>C</sub> = 55°C   | I <sub>O</sub>      | 15<br>25<br>35   |        |        |        |        |        |        | A                |
| Non-Repetitive Peak Forward Surge<br>Current 8.3ms single half sine-wave<br>Superimposed on rated load<br>(JEDEC Method) | I <sub>FSM</sub>    | 300<br>300<br>400  |        |        |        |        |        |        | A                |
| Forward Voltage Drop<br>(per element)  | V <sub>FM</sub>     | KBPC15 @I <sub>F</sub> = 7.5A<br>KBPC25 @I <sub>F</sub> = 12.5A<br>KBPC35 @I <sub>F</sub> = 17.5A<br>1.1 |        |        |        |        |        |        | V                |
| Peak Reverse Current<br>At Rated DC Blocking Voltage   | I <sub>RM</sub>     | @T <sub>C</sub> = 25°C<br>@T <sub>C</sub> = 125°C<br>5.0<br>500  |        |        |        |        |        |        | μA               |
| I <sup>2</sup> t Rating for Fusing (t < 8.3ms)<br>(Note 1)   | I <sup>2</sup> t    | KBPC15<br>KBPC25<br>KBPC35<br>375<br>375<br>660  |        |        |        |        |        |        | A <sup>2</sup> s |

[查询"KBPC1510GV"供应商](#)
**Maximum Ratings and Electrical Characteristics** @T<sub>A</sub>=25°C unless otherwise specified

|   |                                   |                   |     |
|---|-----------------------------------|-------------------|-----|
| Typical Junction Capacitance (per element) (Note 2)                   | C <sub>j</sub>                    | 300               | pF  |
| Typical Thermal Resistance Junction<br>to Case (per element) (Note 3) | R <sub>θJC</sub>                  | 5.3<br>3.6<br>3.0 | K/W |
| RMS Isolation Voltage from Case to Lead                               | V <sub>ISO</sub>                  | 2500              | V   |
| Operating and Storage Temperature Range                               | T <sub>j</sub> , T <sub>STG</sub> | -65 to +150       | °C  |

Note: 1. Measured at non-repetitive, for t > 1ms and < 8.3ms.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
 3. Thermal resistance junction to case mounted on heatsink.



**ORDERING INFORMATION**

| Product No. | Package Type  | Shipping Quantity |
|-------------|---------------|-------------------|
| KBPCxx00G   | Square Bridge | 50 Units/Box      |
| KBPCxx00GW  | Square Bridge | 50 Units/Box      |
| KBPCxx01G   | Square Bridge | 50 Units/Box      |
| KBPCxx01GW  | Square Bridge | 50 Units/Box      |
| KBPCxx02G   | Square Bridge | 50 Units/Box      |
| KBPCxx02GW  | Square Bridge | 50 Units/Box      |
| KBPCxx04G   | Square Bridge | 50 Units/Box      |
| KBPCxx04GW  | Square Bridge | 50 Units/Box      |
| KBPCxx06G   | Square Bridge | 50 Units/Box      |
| KBPCxx06GW  | Square Bridge | 50 Units/Box      |
| KBPCxx08G   | Square Bridge | 50 Units/Box      |
| KBPCxx08GW  | Square Bridge | 50 Units/Box      |
| KBPCxx10G   | Square Bridge | 50 Units/Box      |
| KBPCxx10GW  | Square Bridge | 50 Units/Box      |

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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**Won-Top Electronics Co., Ltd.**

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

**Phone:** 886-7-822-5408 or 886-7-822-5410

**Fax:** 886-7-822-5417

**Email:** sales@wontop.com

**Internet:** <http://www.wontop.com>

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