

# KBPC40, 50/W SERIES

## 40, 50A HIGH CURRENT BRIDGE RECTIFIER

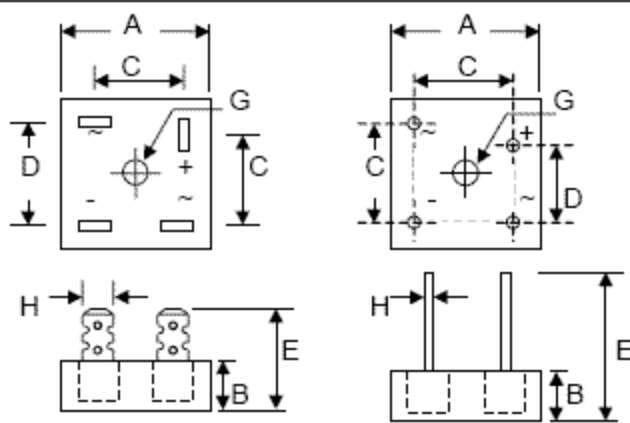
### Features

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Metal Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V
- UL Recognized File # E157705

### Mechanical Data

- Case: Metal Case with Electrically Isolated Epoxy
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #10 Screw
- Weight: KBPC 31.6 grams (approx.)  
KBPC-W 28.5 grams (approx.)
- Marking: Type Number

"W" Suffix Designates Wire Leads  
No Suffix Designates Faston Terminals



KBPC

KBPC-W

| Dim                 | KBPC                              |       | KBPC-W |       |
|---------------------|-----------------------------------|-------|--------|-------|
|                     | Min                               | Max   | Min    | Max   |
| A                   | 28.40                             | 28.70 | 28.40  | 28.70 |
| B                   | 10.97                             | 11.23 | 10.97  | 11.23 |
| C                   | 16.70                             | 18.70 | 17.10  | 19.10 |
| D                   | 17.60                             | 18.50 | 10.90  | 11.90 |
| E                   | 22.88                             | 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              | -00/W  | -01/W | -02/W | -04/W | -06/W | -08/W | -10/W | Unit     |
|---|---------------------|--|-------|-------|-------|-------|-------|-------|----------|
| Peak Repetitive Reverse Voltage   | V <sub>RRM</sub>    |  |       |       |       |       |       |       | V        |
| Working Peak Reverse Voltage  | V <sub>RWM</sub>    | 50   | 100   | 200   | 400   | 600   | 800   | 1000  |          |
| 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>      | KBPC40 40<br>KBPC50 50   |       |       |       |       |       |       | A        |
| Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method) | I <sub>FSM</sub>    | KBPC40 400<br>KBPC50 400   |       |       |       |       |       |       | A        |
| Forward Voltage Drop (per element)  | V <sub>FM</sub>     | KBPC40 @I <sub>F</sub> = 20A<br>KBPC50 @I <sub>F</sub> = 25A 1.2 |       |       |       |       |       |       | V        |
| Peak Reverse Current<br>At Rated DC Blocking Voltage  | I <sub>RM</sub>     | @T <sub>C</sub> = 25°C 10<br>@T <sub>C</sub> = 125°C 1.0         |       |       |       |       |       |       | µA<br>mA |