

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **50 to 1000** Volts
FORWARD CURRENT - **15** Amperes

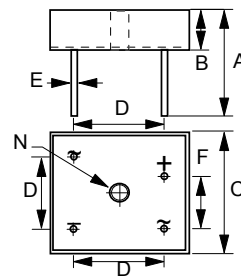
FEATURES

- Rating to 1000V PRV
- High efficiency
- Glass passivated chip junction
- Electrically isolated metal case for maximum heat dissipation
- UL recognized file # E95060

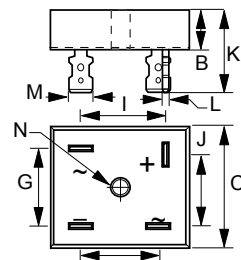
MECHANICAL DATA

- Case : Mounted in the bridge encapsulation
- Polarity : As marked on case
- Mounting : Hole for # 10 screw
- Weight : 0.85 ounces , 24.0 grams (terminal)
: 0.74 ounces , 21.0 grams (wire)

KBPC-GW (Wire)



KBPC-G (Terminal)



| KBPC-G/KBPC-GW | | |
|----------------|-----------------------|-------|
| DIM. | MIN. | MAX. |
| A | 31.80 | - |
| B | 7.90 | 8.40 |
| C | 28.30 | 28.80 |
| D | 17.60 | 18.60 |
| E | 0.97 | 1.07 |
| F | 10.90 | 11.90 |
| G | 17.60 | 18.60 |
| H | 13.80 | 14.80 |
| I | 16.10 | 17.10 |
| J | 16.10 | 17.10 |
| K | 18.80 | 21.30 |
| L | 0.76 | 0.86 |
| M | 6.30 | 6.50 |
| N | HOLE FOR NO. 10 SCREW | |
| | 5.08 | 5.59 |

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOL | KBPC15 005G/W | KBPC15 01G/W | KBPC15 02G/W | KBPC15 04G/W | KBPC15 06G/W | KBPC15 08G/W | KBPC15 10G/W | UNIT |
|--|-------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Rectified Current @T _C = T _a | I _(AV) | 15.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 300 | | | | | | | A |
| Maximum forward Voltage at 7.5A DC | V _F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J = 25°C @T _J = 125°C | I _R | 5.0 500 | | | | | | | uA |
| I ² t Rating for fusing (t < 8.3ms), (Note 1) | I ² t | 374 | | | | | | | A ² S |
| Typical Junction Capacitance per element (Note 2) | C _J | 300 | | | | | | | pF |
| Typical Thermal Resistance (Note 3) | R _{θJC} | 3.0 | | | | | | | °C/W |
| Operating Temperature Range | T _J | -55 to +150 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | °C |

NOTES : 1.Measured at non-repetitive, for greater than 1ms and less than 8.3ms
2.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
3.Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

FIG.1 - FORWARD CURRENT DERATING CURVE

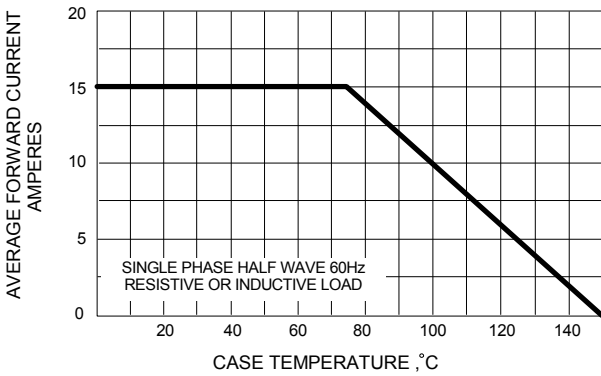


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

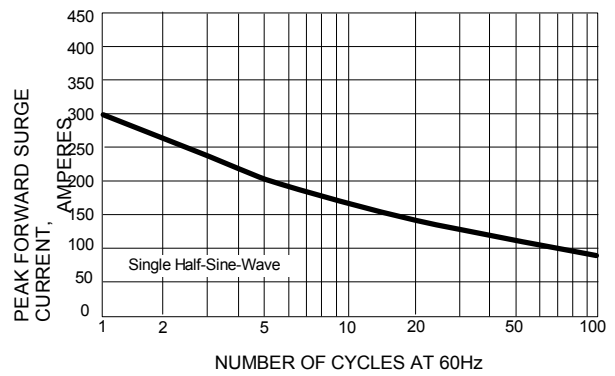


FIG.3 - TYPICAL JUNCTION CAPACITANCE

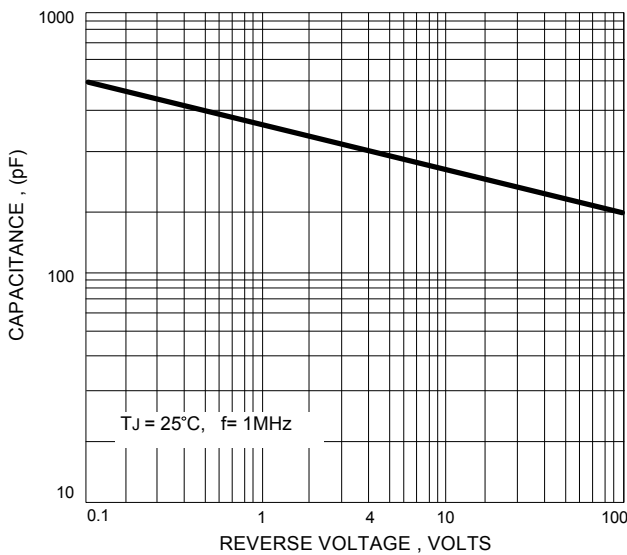


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

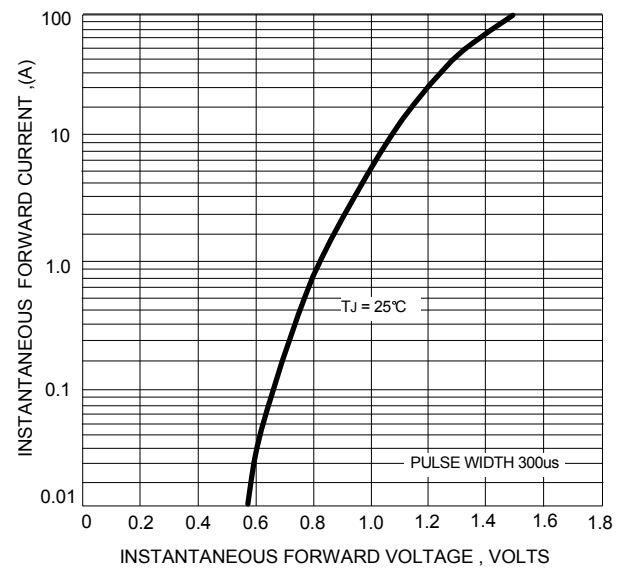


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

