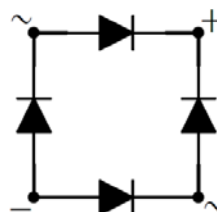




KBPC15005 thru KBPC1510



Glass Passivated Bridge Rectifiers



Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

Primary Characteristics

| | | |
|-----------|---------|----|
| I_F | 15 | A |
| V_{RRM} | 50~1000 | V |
| I_{FSM} | 300 | A |
| V_F | 1.1 | V |
| T_J max | 150 | °C |

Ordering Information

| Part No. | Remark | Package | Packing |
|---------------------------|--------------|---------|----------|
| KBPC15005 thru KBPC1510 | General | KBPC | 50 / Box |
| KBPC15005 thru KBPC1510-H | Halogen Free | | |

Mechanical Data

- Case:KBPC ,Molded plastic
- Terminals:Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity:As Marked on Case
- Mounting Position:Any
- Marking:Type Number
- Lead Free:For RoHS/Lead Free Version

Maximum Ratings (TA=25°C unless otherwise noted)

| PARAMETER | SYMBOL | KBPC 15005 | KBPC 1501 | KBPC 1502 | KBPC 1504 | KBPC 1506 | KBPC 1508 | KBPC 1510 | UNIT |
|---|------------------|-------------|-----------|-----------|-----------|-----------|-----------|-----------|------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Working Peak Reverse Voltage | V_{RWM} | | | | | | | | |
| DC Blocking Voltage | V_{DC} | | | | | | | | |
| RMS Reverse Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current (Note 1)@TC=90°C | $I_{F(AV)}$ | 15.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 300 | | | | | | | A |
| I ² t Rating for Fusing (t < 8.3ms) | I ² t | 373.5 | | | | | | | A ² s |
| Forward Voltage per element @IF=25.0A | V_{FM} | 1.1 | | | | | | | V |
| Peak Reverse Current @TA=25°C At Rated DC Blocking Voltage @TA=125°C | I_R | 5.0 500 | | | | | | | µA |
| Typical Junction Capacitance per leg(Note 2) | C_j | 300 | | | | | | | pF |
| Typical Thermal Capacitance per leg | $R_{θJC}$ | 1.4 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T_J, T_{STG} | -55 to +150 | | | | | | | °C |

NOTES:1.Mounted 35mm x35mm x17mm Al Plate Heatsink.

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



Glass Passivated Bridge Rectifiers

Rating and Characteristics Curves

Fig. 1 Output Current Derating Curve

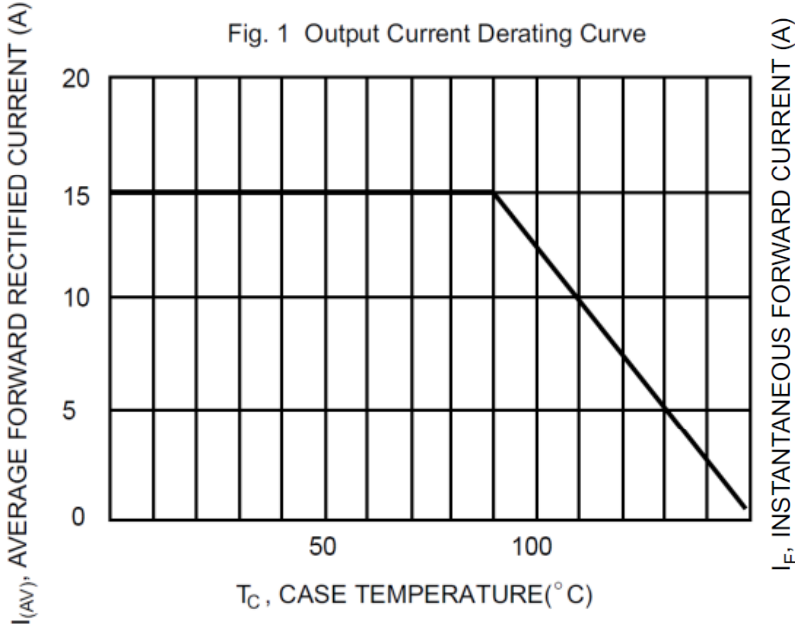


Fig. 2 Typical Forward Characteristics (per leg)

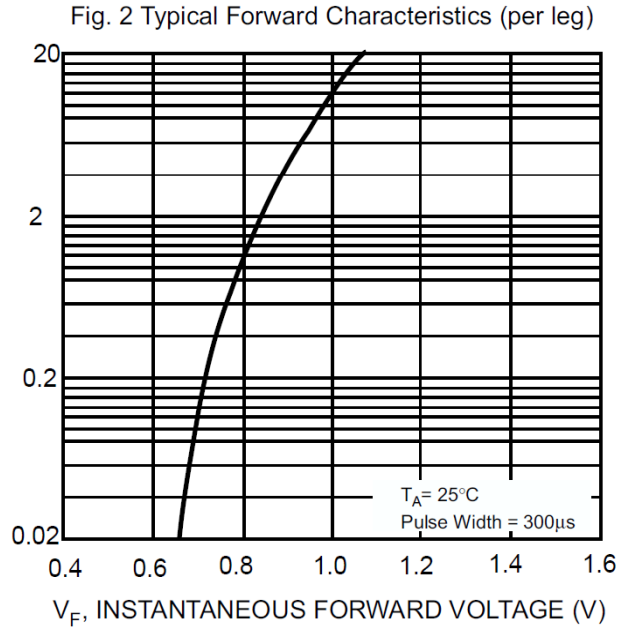


Fig. 3 Maximum Peak Forward Surge Current (per leg)

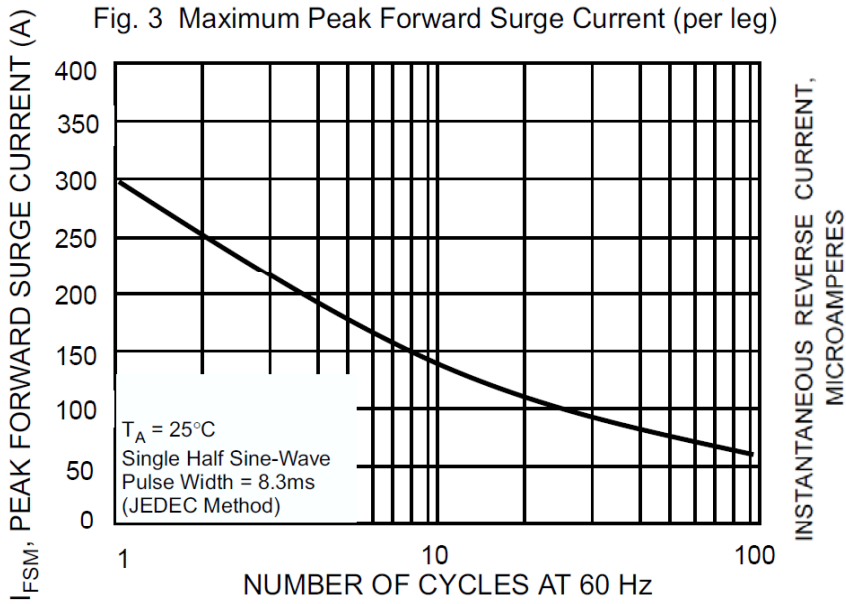
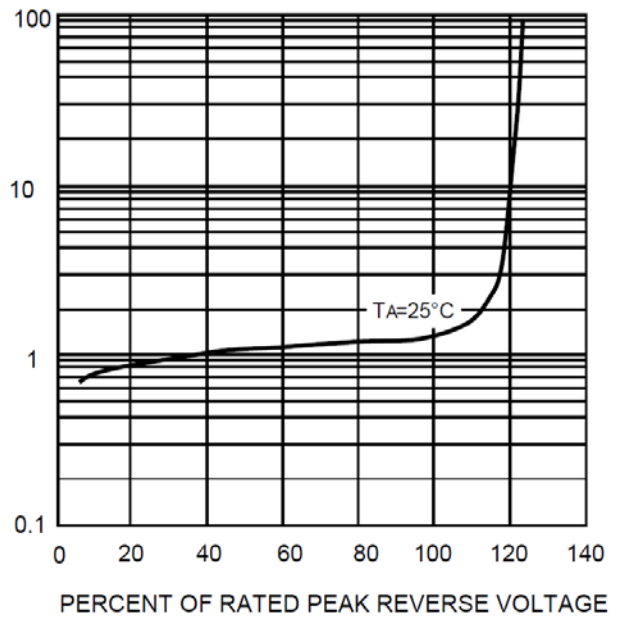


Fig. 4 Typical Junction Capacitance



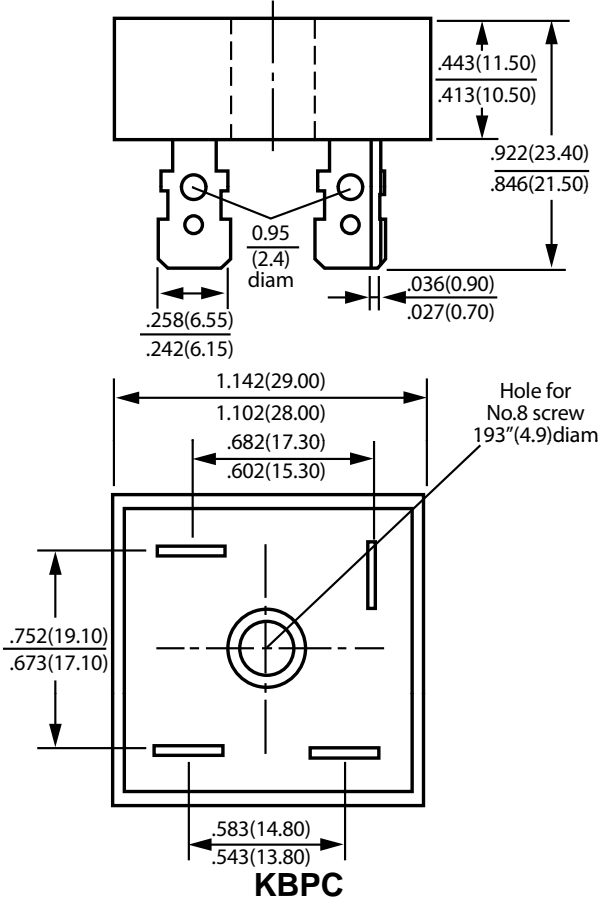


KBPC15005 thru KBPC1510



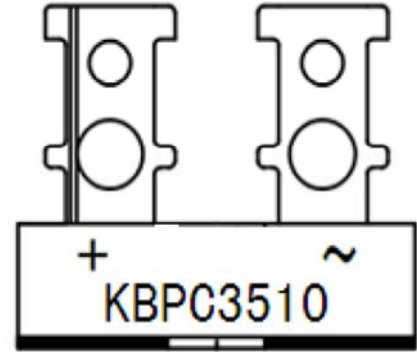
Glass Passivated Bridge Rectifiers

Package Outline Dimensions



Dimensions in inches and (millimeters)

Marking Information



Bulk Packing

| Package | Inner | Inner Box | Inner Box | Carton | Carton Size | Gross Weight |
|---------|-------|-----------|------------|--------|-------------|--------------|
| | Pack | (EA) | (mm) | (EA) | (mm) | (K)-Approx. |
| KBPC | BOX | 50 | 200*170*34 | 400 | 360*215*150 | 0.4 |