## KBP08G-E

# SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

Voltage: 800V Current:1.5A



#### **Features**

Glass passivated chip junction High case dielectric strength High surge current capability Ideal for printed circuit board Halogen Free

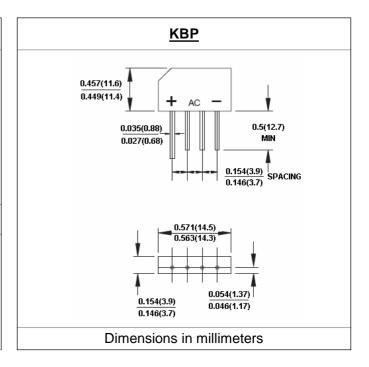
## **Mechanical Data**

Terminal: Plated leads solderable per MIL-STD 202E, Method 208C

Case: UL-94 Class V-0 recognized Halogen Free Epoxy

Polarity: Polarity symbol marked on body

Mounting position: any



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

|   |                       | Symbol   | KBP08G-E    | units              |
|---|-----------------------|----------|-------------|--------------------|
| Maximum repetitive peak reverse voltage   |                       | Vrrm     | 800         | V                  |
| Maximum RMS voltage   |                       | Vrms     | 560         | V                  |
| Maximum DC blocking voltage   |                       | Vdc      | 800         | V                  |
| Maximum average forward rectified output current $Ta = 40^{\circ}\!\mathrm{C}$        |                       | If(av)   | 1.5         | А                  |
| Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method) |                       | Ifsm     | 50          | А                  |
| Maximum instantaneous forward voltage drop per leg at 2.0A                            |                       | Vf       | 1.1         | V                  |
| Rating for fusing (t < 8.3ms)   |                       | l²t      | 10          | A <sup>2</sup> Sec |
| Maximum DC reverse current at rated DC blocking voltage per leg                       | Ta = 25℃<br>Ta = 125℃ | Ir       | 5.0<br>500  | μА                 |
| Typical Thermal Resistance  | (Note 1)              | Rth(ja)  | 25          |                    |
|   | (Note 1)              | Rth(jl)  | 8.0         | °C/W               |
|   | (Note 2)              | Rth(jc)  | 10.0        |                    |
| Typical junction capacitance per leg at 4.0V,1MHz                                     |                       | Cj       | 15          | pF                 |
| Operating junction and storage temperature range                                      |                       | Tj, Tstg | -55 to +150 | °C                 |
|   |                       |          |             |                    |

## Note:

- 1. Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.4" ×0.4" (10×10mm)copper pads
- 2. Thermal Resistance from Junction to Case Mounted on heatsink

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### **RATINGS AND CHARACTERISTIC CURVES KBP08G-E**

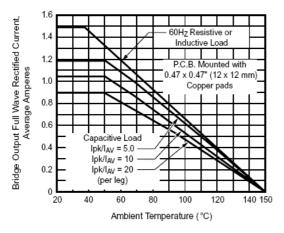


Figure 1. Derating Curve Output Rectified Current

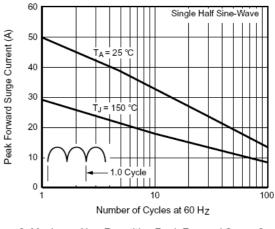


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current
Per Leg

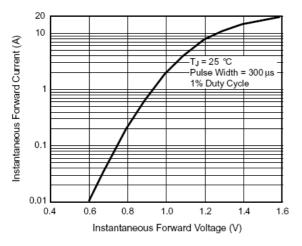


Figure 3. Typical Forward Characteristics Per Leg

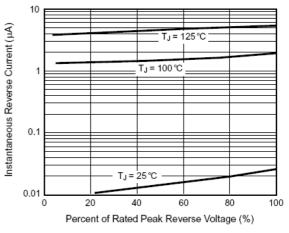


Figure 4. Typical Reverse Leakage Characteristics Per Leg

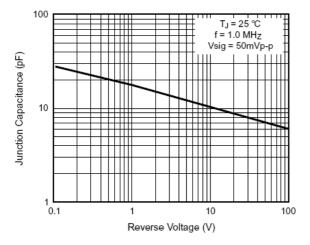


Figure 5. Typical Junction Capacitance Per Leg

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