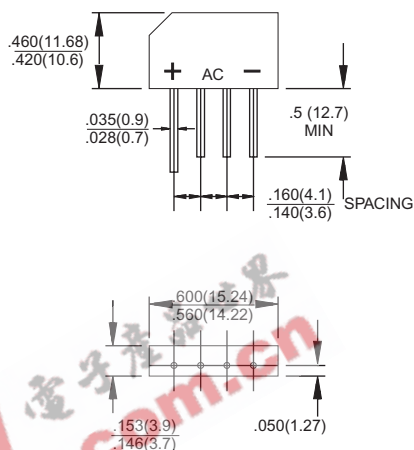


KBP101G - KBP107G

Single Phase 1.0 AMP. Glass Passivated Bridge Rectifiers

KBP



Features

- ✧ UL Recognized File # E-96005
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction
- ✧ High surge current capability
- ✧ High temperature soldering guaranteed:
260 °C / 10 seconds at 5 lbs., (2.3 kg)
tension
- ✧ Leads solderable per MIL-STD-202, Method
208
- ✧ Small size, simple installation

Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

| Type Number | Symbol | KBP 101G | KBP 102G | KBP 103G | KBP 104G | KBP 105G | KBP 106G | KBP 107G | Units |
|---|------------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------------------|
| 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 @ $T_A = 50\text{ }^\circ\text{C}$ | $I_{(AV)}$ | 1.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 30 | | | | | | | A |
| Maximum Instantaneous Forward Voltage @ 1.0A | V_F | 1.0 | | | | | | | V |
| Maximum DC Reverse Current @ $T_A=25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125\text{ }^\circ\text{C}$ | I_R | 10 500 | | | | | | | μA μA |
| Typical Thermal resistance (Note) | $R_{\theta JA}$ $R_{\theta JL}$ | 28 10 | | | | | | | $^\circ\text{C/W}$ |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

Note: Thermal Resistance from Junction to Ambient and from Junction to lead Mounted on P.C.B.
With 0.2" x 0.2" (5mm x 5mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES (KBP101G THRU KBP107G)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

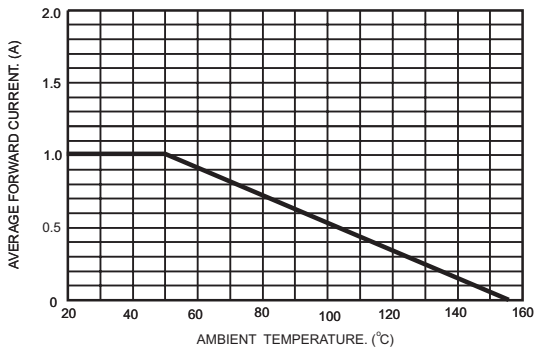


FIG.2- TYPICAL REVERSE CHARACTERISTICS

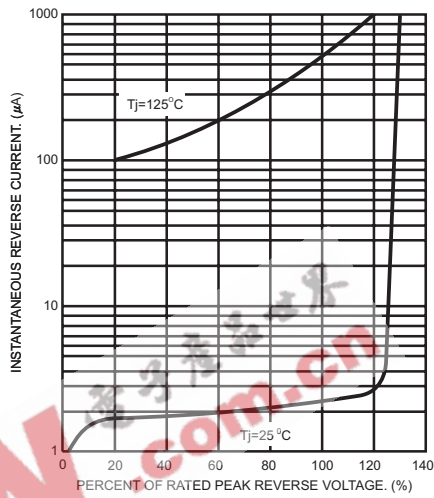


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

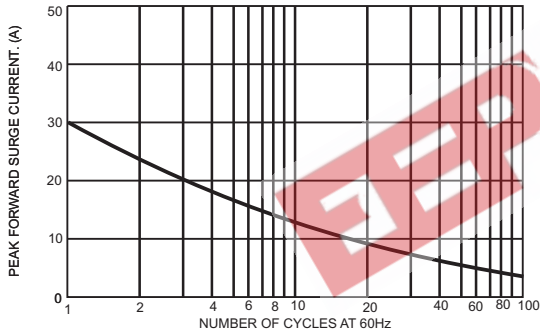


FIG.4- TYPICAL JUNCTION CAPACITANCE

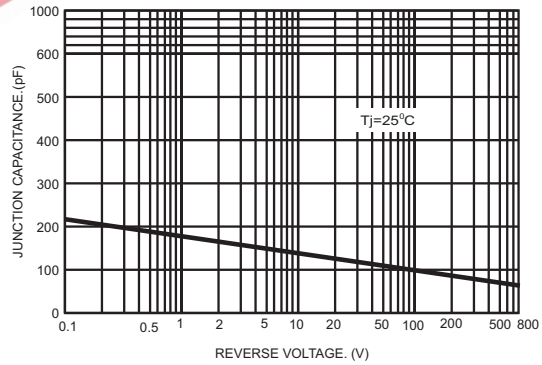


FIG.5- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

