

KBP005G Thru KBP10G



1.5 AMP GLASS PASSIVATED SILICON BRIDGE RECTIFIER

FEATURES

- Rating to 1000V PRV
- Surge overload rating to 40 Amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- UL recognized: File #E106441
- UL recognized 94V-O plastic material

Mechanical Data

- Case: Molded plastic
- Leads: Tin plated copper
- Leads solderable per MIL-STD-202, Method 208
- Weight: 0.05 ounce, 1.52 grams

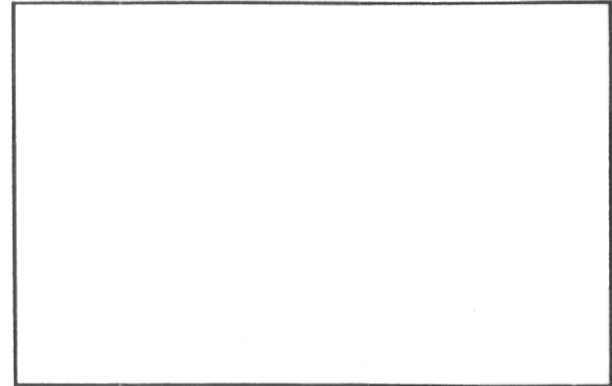
Maximum Ratings & Characteristics

- 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%

| | | KBP 005G | KBP 01G | KBP 02G | KBP 04G | KBP 06G | KBP 08G | KBP 10G | 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} | 60 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Output Current @ $T_A = 75^\circ C$ | $I_{(AV)}$ | 1.5 | | | | | | | A |
| Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load | I_{FSM} | 40 | | | | | | | A |
| Maximum DC Forward Voltage Drop per Element At 1.0A DC | V_F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current At Rated @ $T_A = 25^\circ C$ DC Blocking Voltage per Element @ $T_A = 125^\circ C$ | I_R | 5 500 | | | | | | | μA |
| $I^2 t$ Rating for Fusing ($t < 8.3ms$) | $I^2 t$ | 6.6 | | | | | | | $A^2 S$ |
| Typical Junction Capacitance Per Element * | C_J | 20 | | | | | | | pF |
| Typical Thermal Resistance ** | $R_{(THJ-C)}$ | 18 | | | | | | | $^\circ C/W$ |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ C$ |

Notes: * Measured at 1.0 MHZ and applied reverse voltage of 4.0V DC

** Thermal resistance junction to case



Outline Drawing

