



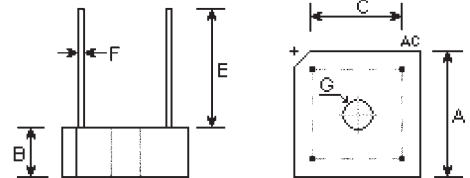
KBPC8005 THRU KBPC810

SINGLE-PHASE SILICON BRIDGE
Reverse Voltage - 50 to 1000 Volts
Forward Current - 8.0 Amperes

Features

- Surge overload rating - 125 amperes peak
- Low forward voltage drop
- Mounting position: Any
- Small size; simple installation
- Silver plated copper leads

BR8



| DIMENSIONS | | | | | |
|------------|--------|-------|--------|--------|------|
| DIM | inches | | mm | | Note |
| | Min. | Max. | Min. | Max. | |
| A | 0.730 | 0.770 | 18.542 | 19.558 | |
| B | 0.250 | 0.300 | 6.35 | 7.63 | |
| C | 0.480 | 0.520 | 12.19 | 13.21 | |
| E | 0.750 | - | 19.1 | - | |
| F | 0.380 | 0.042 | 0.97 | 1.07 | ϕ |
| G | 0.140 | 0.150 | 3.56 | 3.81 | ϕ |

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.
 For capacitive load, derate current by 20%.

| | Symbols | KBPC 8005 | KBPC 801 | KBPC 802 | KBPC 804 | KBPC 806 | KBPC 808 | KBPC 810 | Units |
|---|------------|-------------|----------|----------|----------|----------|----------|----------|----------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS bridge input voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum average forward rectified output current at $T_C=100^\circ\text{C}$ * $T_A=50^\circ\text{C}$ ** | $I_{(AV)}$ | 8.0 | | | | 8.0 | | | Amps |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 125.0 | | | | | | | Amps |
| Maximum forward Voltage drop per bridge element at 4.0A peak | V_F | 1.1 | | | | | | | Volts |
| Maximum DC reverse current at rated DC blocking voltage per element $T_J=25^\circ\text{C}$ $T_A=100^\circ\text{C}$ | I_R | 10.0 | | | | 1.0 | | | uA mA |
| Operating temperature range | T_J | -55 to +125 | | | | | | | °C |
| Storage temperature range | T_{STG} | -55 to +150 | | | | | | | °C |

Notes:

* Unit mounted on metal chassis

** Unit mounted on P.C. board

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 – MAXIMUM FORWARD SURGE CURRENT

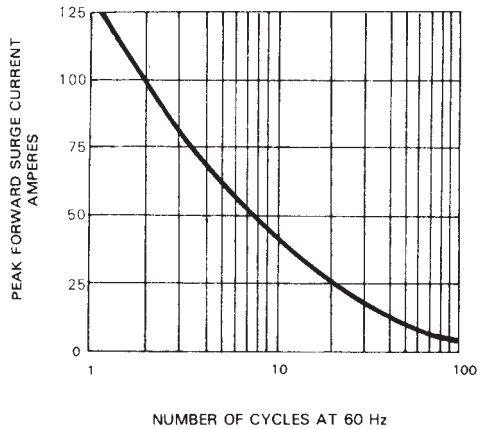


Fig. 2 – DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

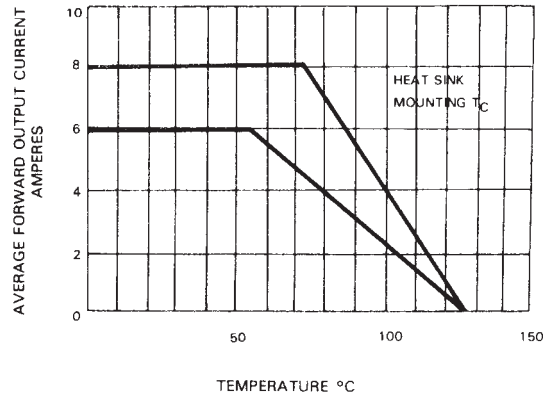


Fig. 3 – TYPICAL FORWARD CHARACTERISTICS

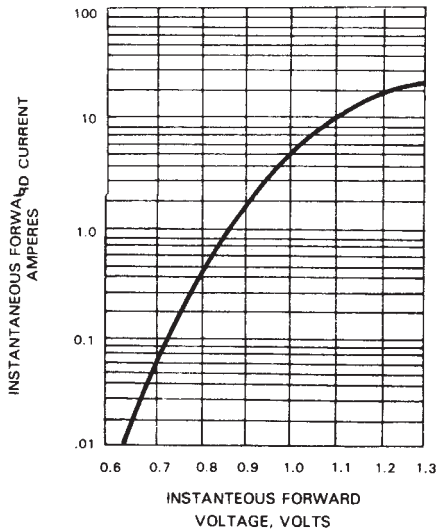


Fig. 4 – TYPICAL REVERSE CHARACTERISTICS

