

BR1005 THRU BR1010

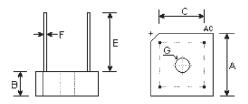
SINGLE-PHASE SILICON BRIDGE

Reverse Voltage - 50 to 1000 Volts Forward Current - 10.0 Amperes

Features

- Surge overload rating 200 amperes peak
- Low forward voltage drop
- Small size; simple installation
- Silver plated copper leads
- Mounting position: Any
- Ceramic case

<u>BR10</u>



| DIMENSIONS | | | | | | | | | | |
|------------|--------|-------|-------|-------|------|--|--|--|--|--|
| DIM | inches | | m | Note | | | | | | |
| | Min. | Max. | Min. | Max. | note | | | | | |
| А | 0.580 | 0.620 | 14.69 | 15.71 | | | | | | |
| В | 0.230 | 0.270 | 5.84 | 6.86 | | | | | | |
| с | 0.405 | 0.445 | 10.29 | 11.31 | | | | | | |
| E | 0.750 | - | 19.1 | - | | | | | | |
| F | 0.038 | 0.042 | 0.97 | 1.07 | ф | | | | | |
| G | Н | | | | | | | | | |

Maximum Ratings and Electrical Characteristics

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

| | Symbols | BR 1005 | BR 101 | BR 102 | BR 104 | BR 106 | BR 108 | BR 1010 | 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 |
| $ \begin{array}{ll} \mbox{Maximum average forward} & T_{\rm c} = 50^{\circ}{\rm C} & \\ \mbox{rctified output current at} & T_{\rm c}^{\rm c} = 100^{\circ}{\rm C} & * \\ \mbox{T}_{\rm A}^{\rm c} = 50^{\circ}{\rm C} & \ast \\ \mbox{T}_{\rm A}^{\rm c} = 50^{\circ}{\rm C} & \ast \\ \end{array} $ | I _(AV) | 10.0 6.0 6.0 | | | | | | | Amps |
| Peak forward surge current, 8.3mS single half sine-wave superimposed on rated load | I _{fsm} | 200.0 | | | | | | | Amps |
| Maximum forward Voltage drop per element at 5.0A peak | V _F | 1.1 | | | | | | | Volts |
| $\begin{array}{lll} \mbox{Maximum DC reverse current at rated} & T_{A} \mbox{=} 25^{\circ}\mbox{C} \\ \mbox{DC blocking voltage per element} & T_{A}^{A} \mbox{=} 100^{\circ}\mbox{C} \end{array}$ | I _R | 10.0 1.0 | | | | | | | uA mA |
| Operating temperature range | T, | -55 to +125 | | | | | | | ĉ |
| 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

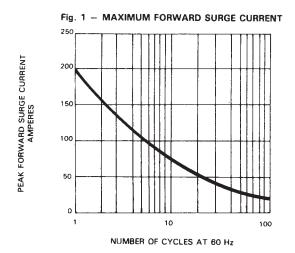
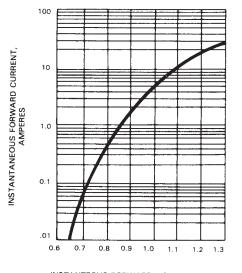


Fig. 2 – DERATING CURVE FOR DUTPUT RECTIFIED CURRENT

TEMPERATURE °C



INSTANTEOUS FORWARD VOLTAGE, VOLTS

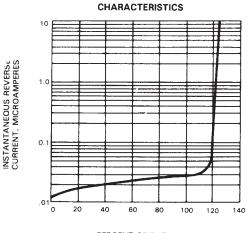


Fig. 4 - TYPICAL REVERSE

PERCENT OF RATED PEAK REVERSE VOLTAGE

Fig. 3 – TYPICAL FORWARD CHARACTERISTICS

AVENAGE FORWARD OUTPUT CURRENT AMPERES