



# BR605 THRU BR610

## SINGLE-PHASE SILICON BRIDGE

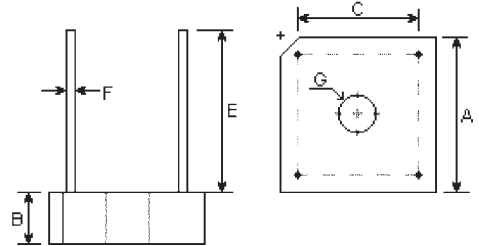
Reverse Voltage - 50 to 1000 Volts

Forward Current - 6.0 Amperes

### Features

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

### BR6



| DIMENSIONS |                      |       |       |       |      |
|------------|----------------------|-------|-------|-------|------|
| DIM        | inches               |       | mm    |       | Note |
|            | Min.                 | Max.  | Min.  | Max.  |      |
| A          | 0.580                | 0.620 | 14.69 | 15.71 |      |
| B          | 0.230                | 0.270 | 5.84  | 6.86  |      |
| C          | 0.405                | 0.445 | 10.29 | 11.31 |      |
| E          | 0.750                | -     | 19.1  | -     |      |
| F          | 0.038                | 0.042 | 0.97  | 1.07  | φ    |
| G          | HOLE FOR NO. 6 SCREW |       |       |       |      |

### Maximum Ratings and Electrical 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%.

|                                                                                                             | Symbols    | BR605       | BR61 | BR62 | BR64 | BR66 | BR68 | BR610 | 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 $T_A=100^{\circ}C$ *<br>$T_A=50^{\circ}C$ **            | $I_{(AV)}$ | 6.0<br>6.0  |      |      |      |      |      |       | 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 element at 3.0A peak                                                       | $V_F$      | 1.0         |      |      |      |      |      |       | Volt     |
| Maximum DC reverse current at rated DC blocking voltage per element $T_A=25^{\circ}C$<br>$T_A=100^{\circ}C$ | $I_R$      | 10.0<br>1.0 |      |      |      |      |      |       | uA<br>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 — DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT

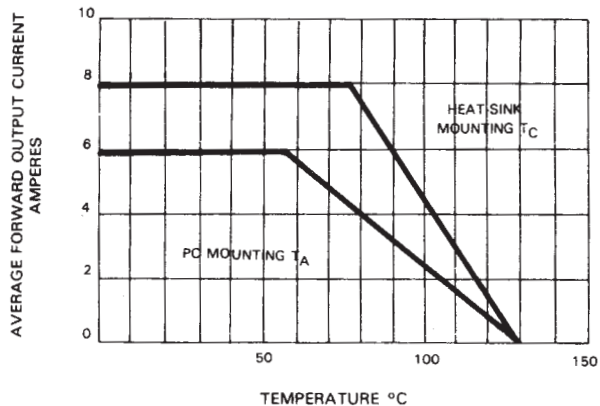


Fig. 2 — TYPICAL REVERSE  
CHARACTERISTICS

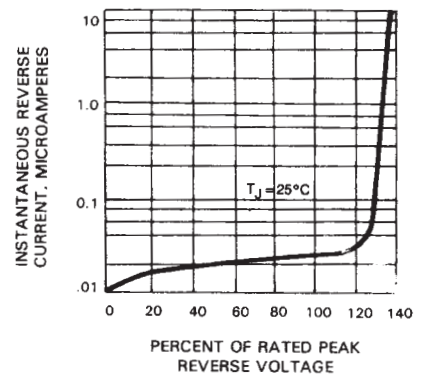


Fig. 3 — MAXIMUM FORWARD SURGE CURRENT

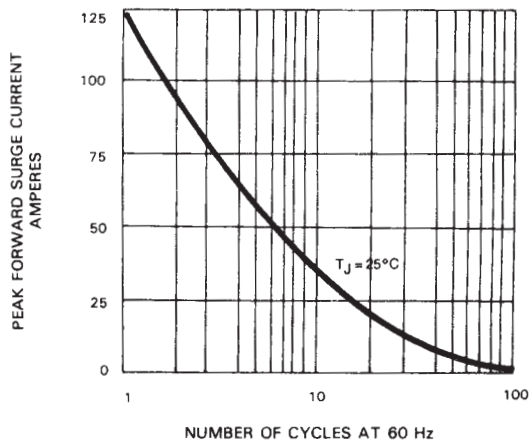


Fig. 4—TYPICAL INSTANTANEOUS  
FORWARD CHARACTERISTICS

