

# BR10005-G Thru. BR5010-G Series

Reverse Voltage: 50 to 1000V

Forward Current: 10/15/25/35/50A

RoHS Device

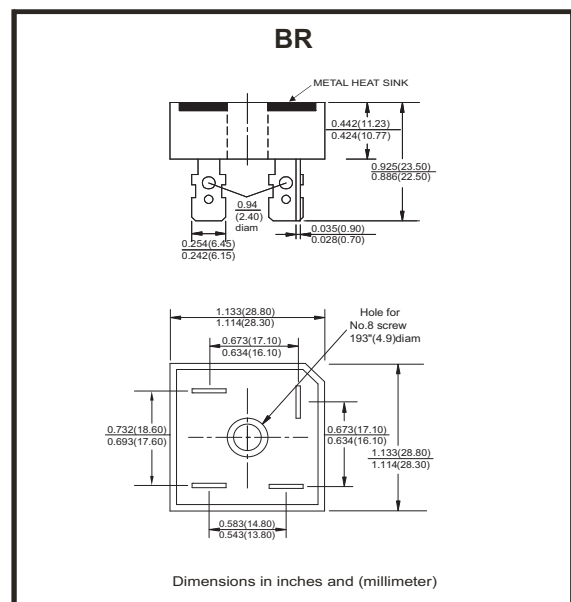


## Features

- Surge overload -240~500 Amperes peak.
- Low forward voltage drop.
- Electrically isolated base -2000 Volts.
- Materials used carries U/L recognition.
- Solderable 0.25" FAST ON terminals.

## Mechanical Data

- Polarity: As marked on Body
- Mounting position: Any
- Weight: 19.09grams



## Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%

| Parameter                           | Symbol    | BR-G  | BR-G | BR-G | BR-G | BR-G | BR-G | BR-G | Unit |
|-------------------------------------|-----------|-------|------|------|------|------|------|------|------|
|                                     |           | 10005 | 1001 | 1002 | 1004 | 1006 | 1008 | 1010 |      |
|                                     |           | 15005 | 1501 | 1502 | 1504 | 1506 | 1508 | 1510 |      |
|                                     |           | 25005 | 2501 | 2502 | 2504 | 2506 | 2508 | 2510 |      |
|                                     |           | 35005 | 3501 | 3502 | 3504 | 3506 | 3508 | 3510 |      |
|                                     |           | 50005 | 5001 | 5002 | 5004 | 5006 | 5008 | 5010 |      |
| Max. Recurrent Peak Reverse Voltage | $V_{RRM}$ | 50    | 100  | 200  | 400  | 600  | 800  | 1000 | V    |
| Maximum RMS Bridge Input Voltage    | $V_{RRM}$ | 35    | 70   | 140  | 280  | 420  | 560  | 700  | V    |

| Parameter                                                                                 | Symbol    | BR10        | BR15 | BR25 | BR35 | BR50 | Unit             |
|-------------------------------------------------------------------------------------------|-----------|-------------|------|------|------|------|------------------|
| Maximum Average Forward Rectified Output Current @ $T_c=55^\circ\text{C}$                 | $I_{AV}$  | 10          | 15   | 25   | 35   | 50   | A                |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load       | $I_{FSM}$ | 240         | 300  | 400  | 400  | 500  | A                |
| Maximum Forward Voltage Drop Per Element at 5.0/7.5/12.5/17.5/25.0A Peak                  | $V_F$     | 1.1         |      |      |      |      | V                |
| Maximum Reverse Current at rated DC Blocking Voltage Per Element @ $T_J=25^\circ\text{C}$ | $I_R$     | 10.0        |      |      |      |      | $\mu\text{A}$    |
| Operating Temperature Range                                                               | $T_J$     | -55 to +150 |      |      |      |      | $^\circ\text{C}$ |
| Storage Temperature Range                                                                 | $T_{STG}$ | -55 to +150 |      |      |      |      | $^\circ\text{C}$ |

Company reserves the right to improve product design, functions and reliability without notice.

REV: A

Fig.1 - Derating Curve Output Rectified Current

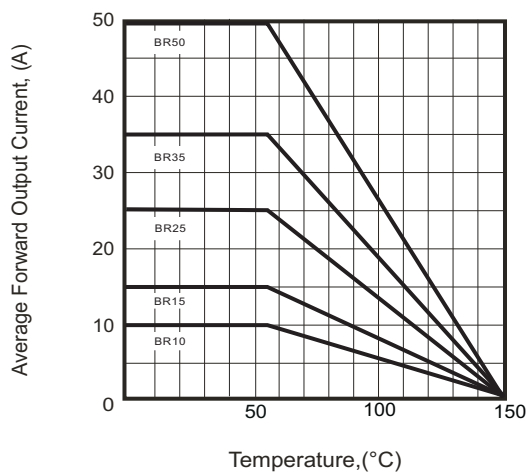


Fig.2 - Typical Forward Characteristics

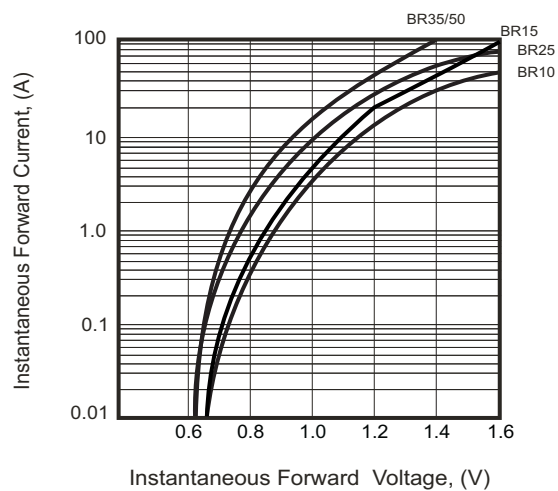


Fig.3 - Maximum Forward Surge Current

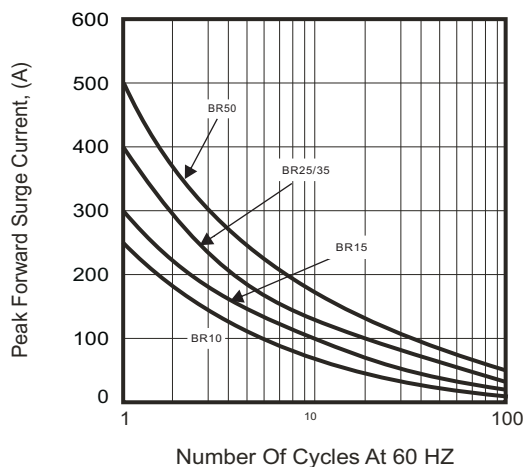
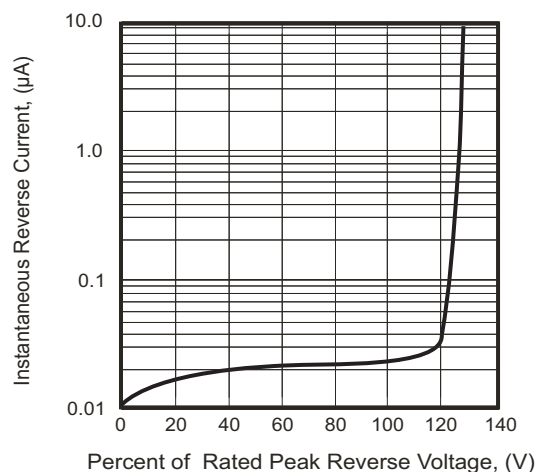
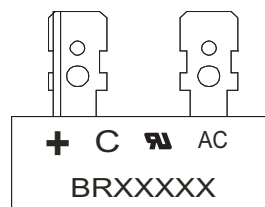


Fig.4 - Typical Reverse Characteristics



## Marking Code

| Part Number | Marking code |
|-------------|--------------|
| BR10005-G   | BR10005      |
| BR15005-G   | BR15005      |
| BR25005-G   | BR25005      |
| BR35005-G   | BR35005      |
| BR50005-G   | BR50005      |
| BR1001-G    | BR1001       |
| BR1501-G    | BR1501       |
| BR2501-G    | BR2501       |
| BR3501-G    | BR3501       |
| BR5001-G    | BR5001       |
| BR1002-G    | BR1002       |
| BR1502-G    | BR1502       |
| BR2502-G    | BR2502       |
| BR3502-G    | BR3502       |
| BR5002-G    | BR5002       |
| BR1004-G    | BR1004       |
| BR1504-G    | BR1504       |
| BR2504-G    | BR2504       |
| BR3504-G    | BR3504       |
| BR5004-G    | BR5004       |
| BR1006-G    | BR1006       |
| BR1506-G    | BR1506       |
| BR2506-G    | BR2506       |
| BR3506-G    | BR3506       |
| BR5006-G    | BR5006       |
| BR1008-G    | BR1008       |
| BR1508-G    | BR1508       |
| BR2508-G    | BR2508       |
| BR3508-G    | BR3508       |
| BR5008-G    | BR5008       |
| BR1010-G    | BR1010       |
| BR1510-G    | BR1510       |
| BR2510-G    | BR2510       |
| BR3510-G    | BR3510       |
| BR5010-G    | BR5010       |



**XXXXX / XXXX = Product type marking code**

**C = Compchip Logo**

## Standard Packaging

| Case Type | BULK PACK      |                   |
|-----------|----------------|-------------------|
|           | BOX<br>( pcs ) | CARTON<br>( pcs ) |
| BR        | 50             | 500               |