



# DBF40G

## 4.0A Single-Phase Bridge Rectifier

ON Semiconductor®

<http://onsemi.com>

### Features

- Glass passivation for high reliability
- Plastic molded structure
- Peak reverse voltage :  $V_{RM}=600V$
- Average output current :  $I_O=4.0A$

### Specifications

#### Absolute Maximum Ratings at $T_a=25^\circ C$

| Parameter              | Symbol    | Conditions  | Value       | Unit       |
|------------------------|-----------|---|-------------|------------|
| Peak Reverse Voltage   | $V_{RM}$  |   | 600         | V          |
| Average Output Current | $I_O$     | $T_c=108^\circ C$ , with $80 \times 80 \times 1.5mm^3$ Al fin | 4.0         | A          |
|                        |           | $T_a=25^\circ C$ , without fin                                | 2.3         | A          |
| Surge Forward Current  | $I_{FSM}$ | 50Hz sine wave, 1 cycle                                       | 80          | A          |
| Junction Temperature   | $T_j$     |   | 150         | $^\circ C$ |
| Storage Temperature    | $T_{stg}$ |   | -40 to +150 | $^\circ C$ |

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

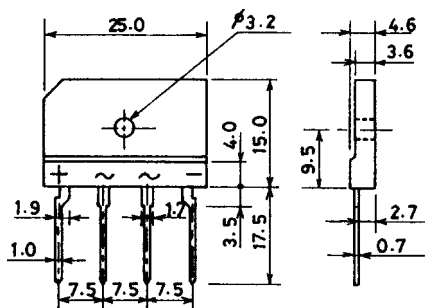
#### Electrical Characteristics at $T_a=25^\circ C$

| Parameter                            | Symbol        | Conditions   | Value |     |      | Unit           |
|--------------------------------------|---------------|--------------|-------|-----|------|----------------|
|                                      |               |              | min   | typ | max  |                |
| Forward Voltage                      | $V_F$         | $I_F=2.0A$   |       |     | 1.05 | V              |
| Reverse Current                      | $I_R$         | $V_R=V_{RM}$ |       |     | 10   | $\mu A$        |
| Thermal Resistance(Junction-Ambient) | $R_{th(j-a)}$ | Without fin  |       |     | 30   | $^\circ C / W$ |
| Thermal Resistance(Junction-Case)    | $R_{th(j-c)}$ | With Al fin  |       |     | 5.5  | $^\circ C / W$ |

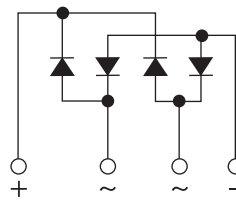
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

### Package Dimensions

unit:mm(typ.)

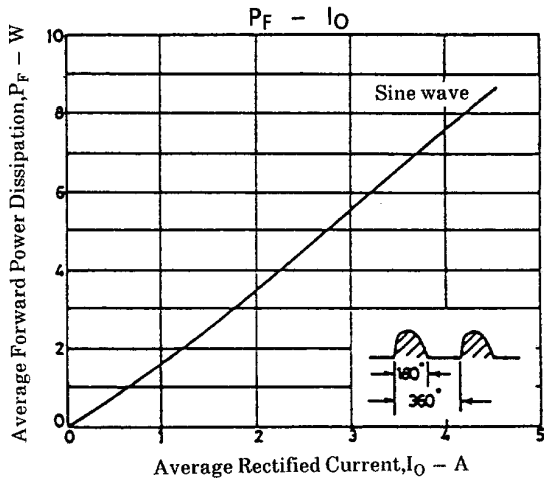
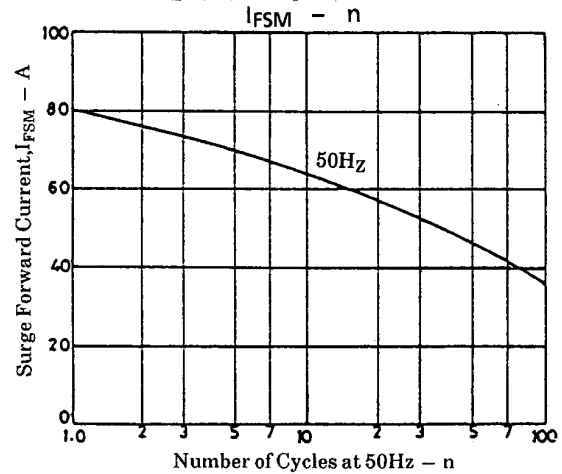
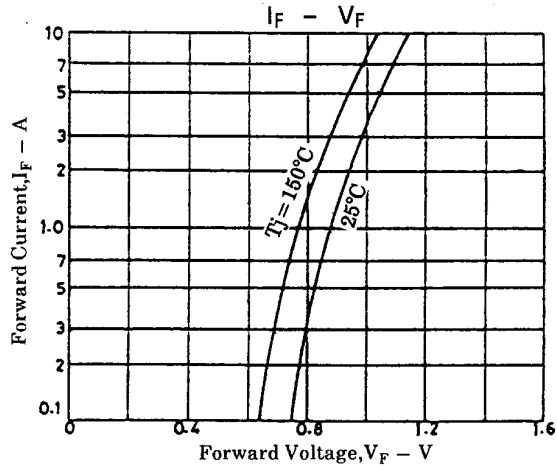
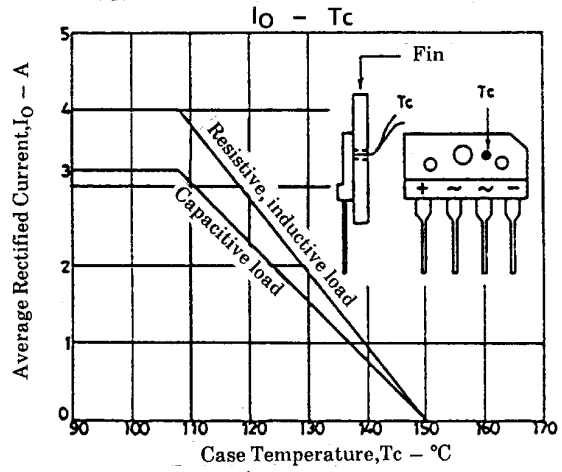
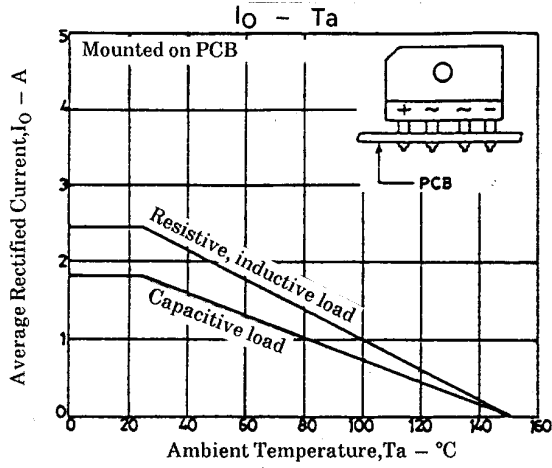


### Electrical Connection



### Ordering Information

| Device | Shipping     | memo    |
|--------|--------------|---------|
| DBF40G | 250 pcs./box | Pb-Free |



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