

**DBF40T**

Silicon Diffused Junction Type

4.0A Single-Phase Bridge Rectifier**Applications**

- For primary rectification as switching regulator.

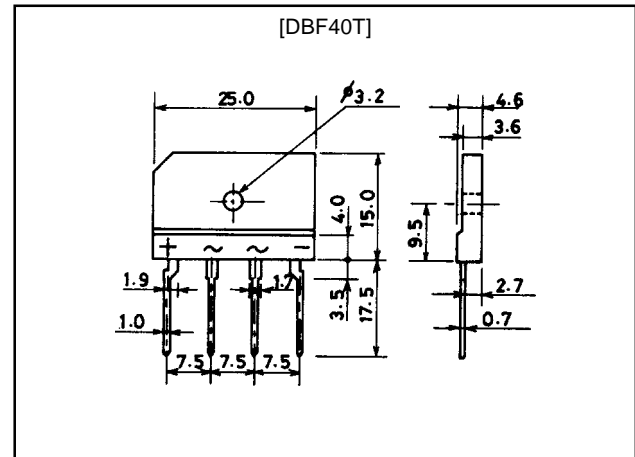
Features

- High reliability attained glass passivation.
- High surge.
- Plastic molded structure.
- Peak reverse voltage: $V_{RM}=200$ to $600V$.
- Average rectified current: $I_O=4.0A$.

Package Dimensions

unit:mm

1203

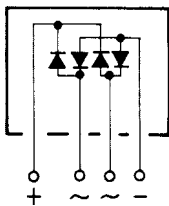
**Specifications****Absolute Maximum Ratings at $T_a = 25^\circ C$**

| Parameter | Symbol | Conditions | DBF40TC | DBF40TE | DBF40TG | Unit |
|---------------------------|-----------|---|---------|---------|-------------|------------|
| Peak Reverse Voltage | V_{RM} | | 200 | 400 | 600 | V |
| Average Rectified 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 | → | → | 120 | A |
| Junction Temperature | T_J | | → | → | 150 | $^\circ C$ |
| Storage Temperature | T_{stg} | | → | → | -40 to +150 | $^\circ C$ |

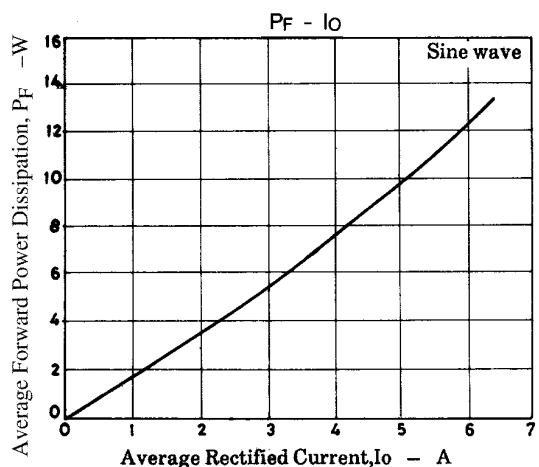
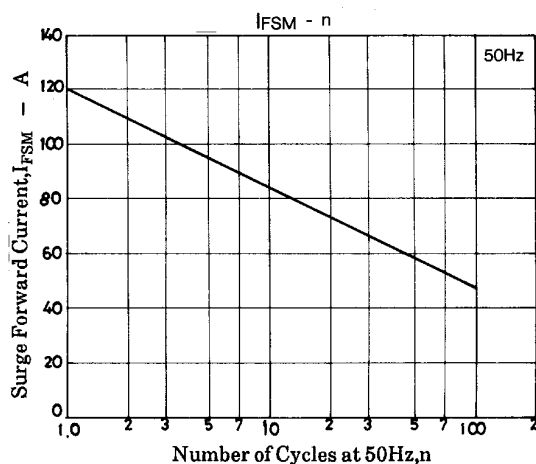
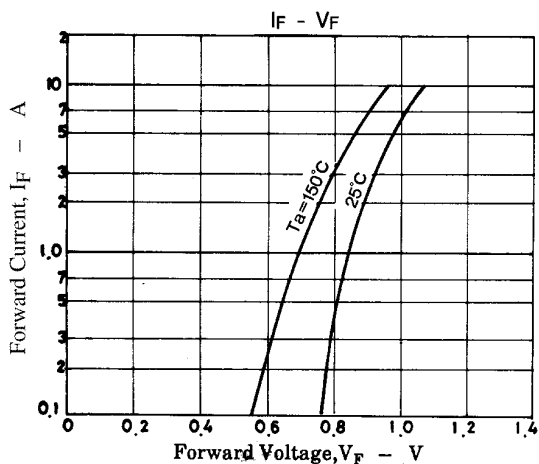
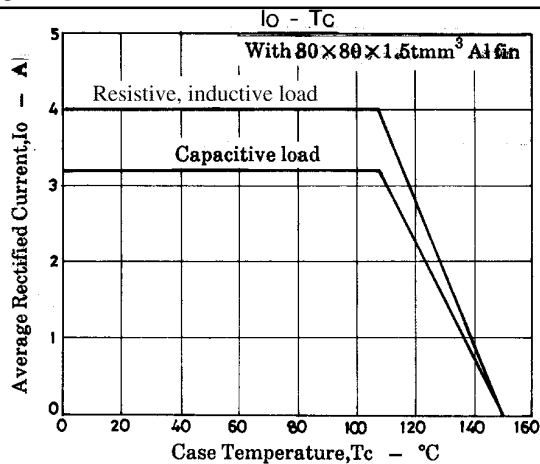
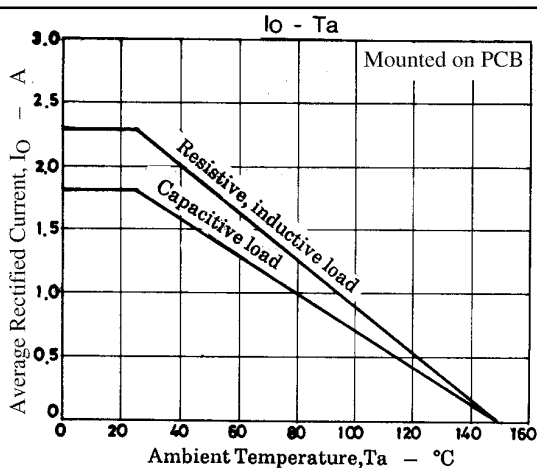
Electrical Characteristics at $T_a = 25^\circ C$, per constituent element of bridge.

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---------------------------------------|---------------|--------------------------|---------|-----|------|--------------|
| | | | min | typ | max | |
| Forward Voltage | V_F | $I_F=2.0A$ | | | 1.05 | V |
| Reverse Current | I_R | V_R : At each V_{RM} | | | 10 | μA |
| 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 | $^\circ C/W$ |

Note: Mounting torque: 5kg·cm max

Electrical Connection

DBF40T



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