



SANYO Semiconductors

DATA SHEET

DBG150G

 — Diffused Junction Silicon Diode

15A Single-Phase Bridge Rectifier

Features

- Glass passivation for high reliability.
- Plastic molded structure.
- Peak reverse voltage : $V_{RM}=600V$.
- Average output current : $I_O=15A$.

Specifications

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

| Parameter | Symbol | Conditions | Ratings | Unit |
|-----------------------------|-----------|-------------------------------------|-------------|------------|
| Peak Reverse Voltage | V_{RM} | | 600 | V |
| Average Output Current | I_O | $T_c=124^\circ C$, with heatsink | 15 | A |
| | | $T_a=26^\circ C$, without heatsink | 3.6 | A |
| Surge Forward Current | I_{FSM} | 50Hz sine 1cycle peak value | 200 | A |
| Junction Temperature | T_J | | 150 | $^\circ C$ |
| Storage Temperature | T_{stg} | | -55 to +150 | $^\circ C$ |
| Dielectric Strength Voltage | V_{dis} | Terminals to case, AC 1 minute | 2.5 | kV |
| Tightening Torque | TOR | (): recommended value | 0.8(0.5) | N•m |

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 | $I_F=7.5A$ | | | 0.9 | V |
| Reverse Current | I_R | $V_R=600V$ | | | 10 | μA |
| Thermal Resistance(Junction-Ambient) | $R_{th(j-a)}$ | Without heatsink | | | 25 | $^\circ C / W$ |
| Thermal Resistance(Junction-Case) | $R_{th(j-c)}$ | With heatsink | | | 1 | $^\circ C / W$ |
| Thermal Resistance(Junction-Lead) | $R_{th(j-l)}$ | Without heatsink | | | 5 | $^\circ C / W$ |

Marking: BG150G

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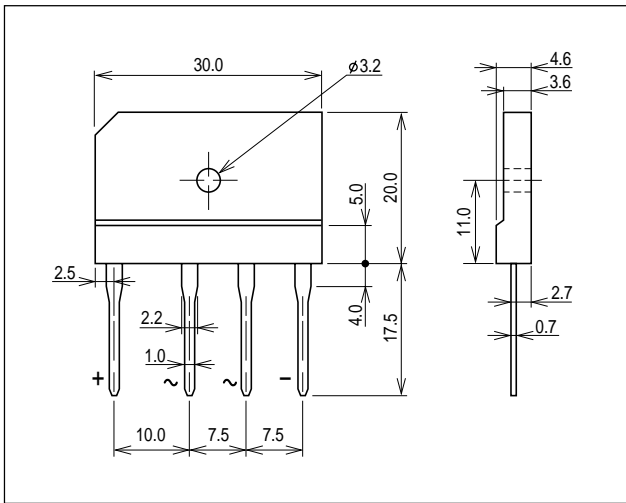
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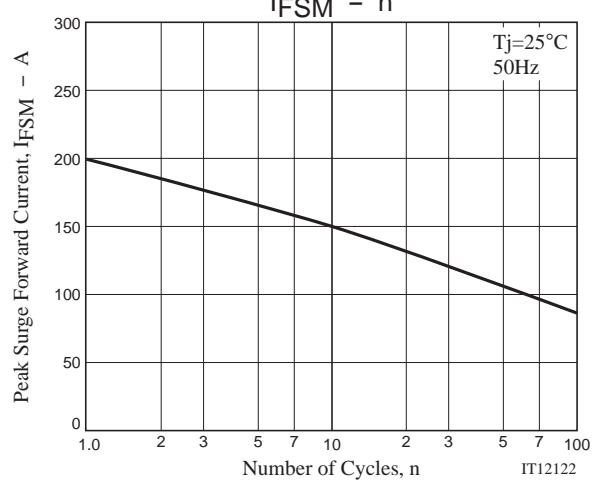
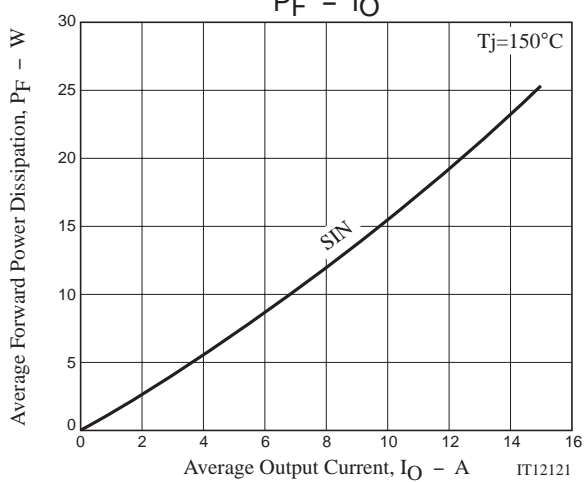
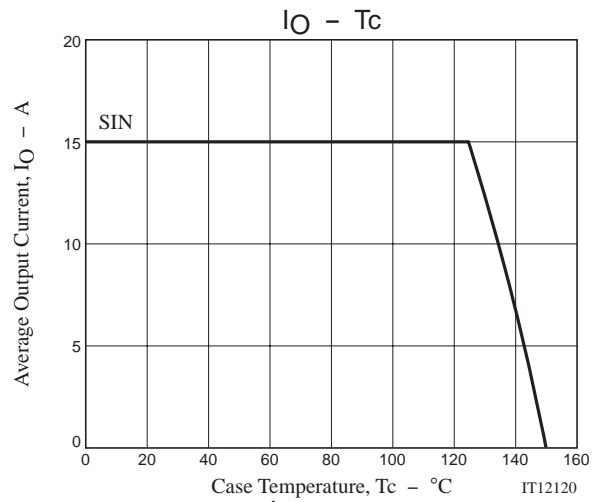
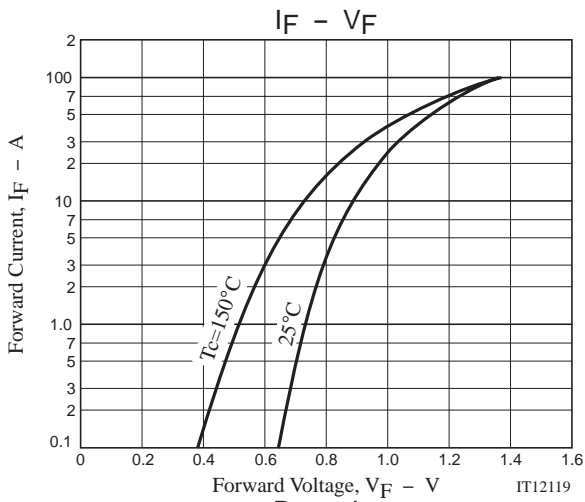
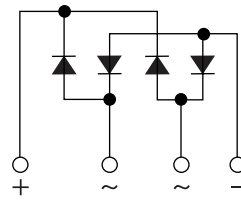
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Package Dimensions

unit : mm (typ)
7804-001



Electrical Connection



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