

# 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<sub>RM</sub>=600V.
Average output current: I<sub>O</sub>=15A.

## **Specifications**

#### Absolute Maximum Ratings at Ta=25°C

| Parameter                  | Symbol | Conditions                     | Ratings     | Unit |
|----------------------------|--------|--------------------------------|-------------|------|
| Peak Reverse Voltage       | VRM    |                                | 600         | V    |
| Average Output Current     | Ю      | Tc=124°C, with heatsink        | 15          | Α    |
|                            |        | Ta=26°C, without heatsink      | 3.6         | Α    |
| Surge Forward Current      | IFSM   | 50Hz sine 1cycle peak value    | 200         | Α    |
| Junction Temperature       | Tj     |                                | 150         | °C   |
| Storage Temperature        | Tstg   |                                | -55 to +150 | °C   |
| Dilective Strength Voltage | Vdis   | Terminals tc case, AC 1 minute | 2.5         | kV   |
| Tightening Torque          | TOR    | (): recommended value          | 0.8(0.5)    | N•m  |

#### **Electrical Characteristics** at Ta=25°C Per Constituent element of bridge.

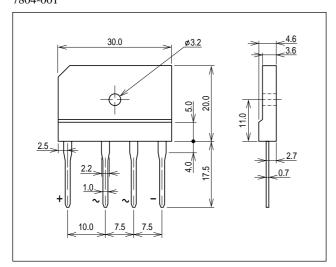
| Parameter                            | Symbol   | Conditions           | Ratings |     |     | Unit   |
|--------------------------------------|----------|----------------------|---------|-----|-----|--------|
|                                      |          |                      | min     | typ | max | Offic  |
| Forward Voltage                      | ٧F       | I <sub>F</sub> =7.5A |         |     | 0.9 | V      |
| Reverse Current                      | IR       | V <sub>R</sub> =600V |         |     | 10  | μΑ     |
| Thremal Resistance(Junction-Ambient) | Rth(j-a) | Without heatsink     |         |     | 25  | °C/W   |
| Thremal Resistance(Junction-Case)    | Rth(j-c) | With heatsink        |         |     | 1   | °C/W   |
| Thremal Resistance(Junction-Lead)    | Rth(j-l) | Without heatsink     |         |     | 5   | °C / W |

Marking: BG150G

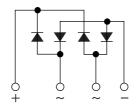
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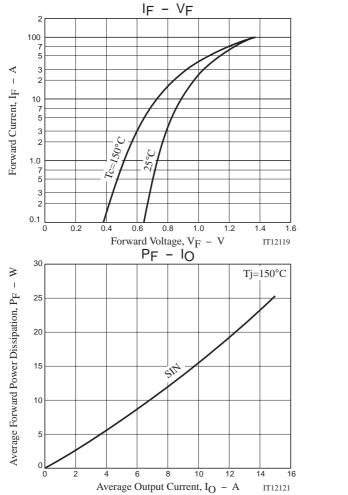
## **Package Dimensions**

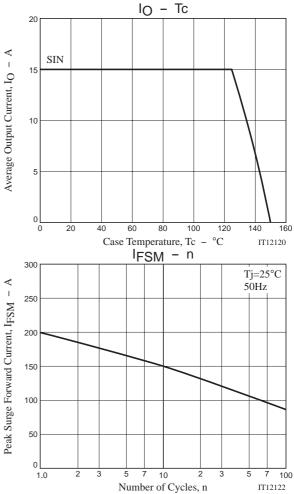
unit : mm (typ) 7804-001



## **Electrical Connection**







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