



# DB2W31900L

Silicon epitaxial planar type

For rectification

■ Features

- Low forward voltage VF
- Low terminal capacitance Ct
- Halogen-free / RoHS compliant  
 (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Marking Symbol: 3W

■ Packaging

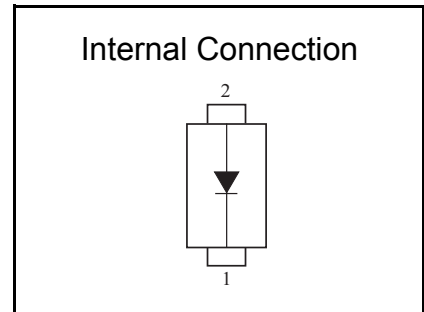
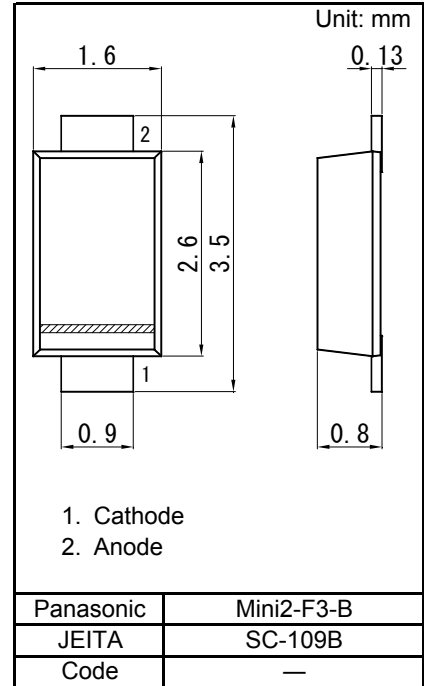
Embossed type (Thermo-compression sealing) : 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings Ta = 25 °C

| Parameter   | Symbol | Rating      | Unit |
|---|--------|-------------|------|
| Reverse voltage (direct current)                        | VR     | 30          | V    |
| Forward current (average) <sup>*1</sup>                 | IF(AV) | 3           | A    |
| Non-repetitive peak forward surge current <sup>*2</sup> | IFSM   | 30          | A    |
| Junction temperature                                    | Tj     | 125         | °C   |
| Operating ambient temperature                           | Topr   | -40 to +85  | °C   |
| Storage temperature                                     | Tstg   | -55 to +125 | °C   |

Note) \*1 For embedded alumina substrate (substrate size: 5 cm×5 cm)

\*2 50 Hz sine wave 1 cycle (Non-repetitive peak current)

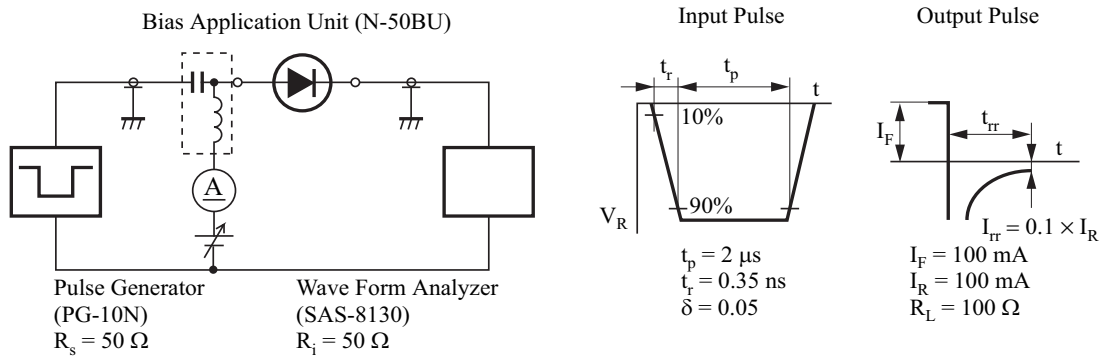




■ Electrical Characteristics  $T_a = 25\text{ }^\circ\text{C} \pm 3\text{ }^\circ\text{C}$

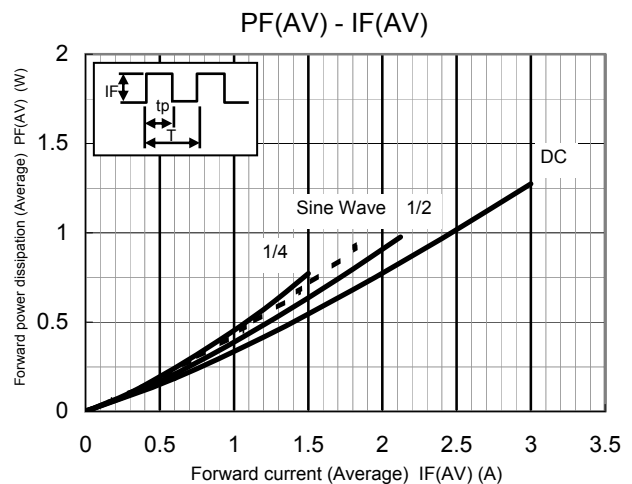
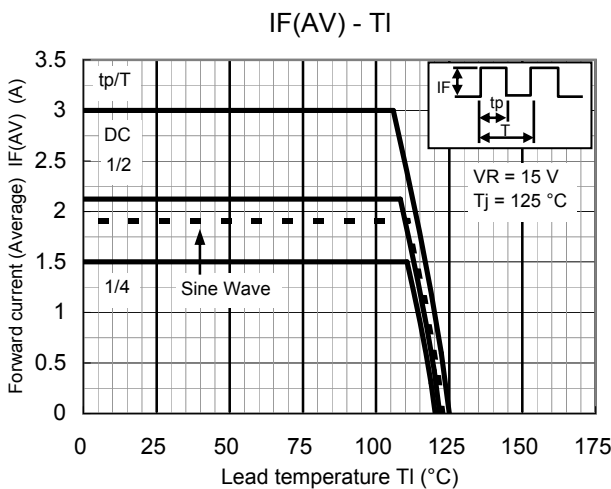
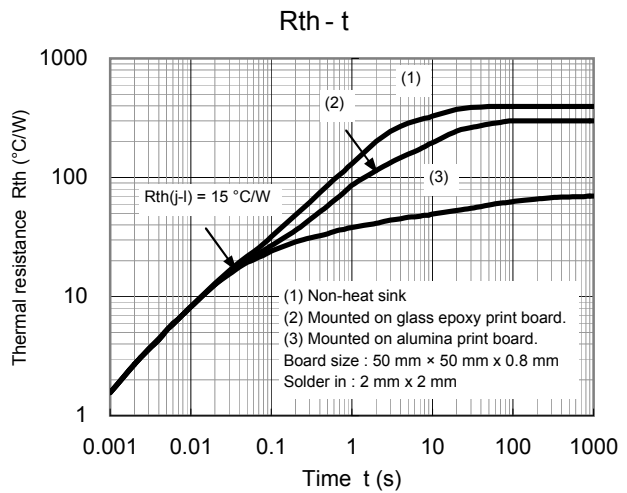
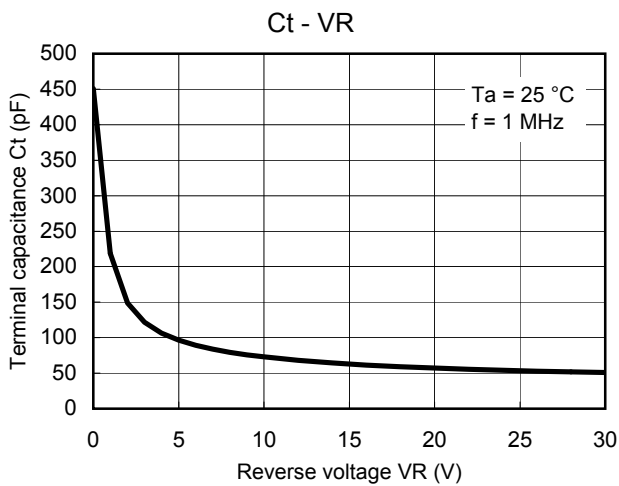
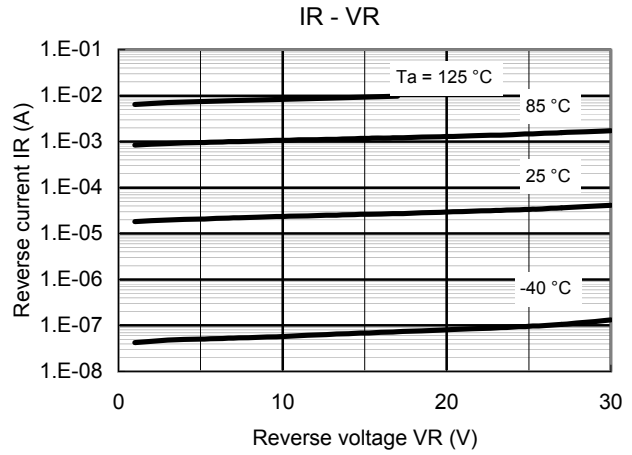
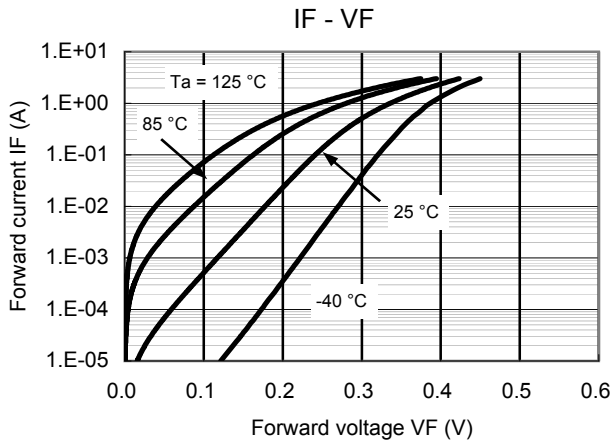
| Parameter                | Symbol | Conditions   | Min | Typ  | Max  | Unit          |
|--------------------------|--------|--|-----|------|------|---------------|
| Forward voltage          | VF     | IF = 3 A   |     | 0.42 | 0.49 | V             |
| Reverse current          | IR     | VR = 30 V  |     | 50   | 200  | $\mu\text{A}$ |
| Terminal capacitance     | Ct     | VR = 10 V, f = 1 MHz                                   |     | 70   |      | pF            |
| Reverse recovery time *1 | trr    | IF = IR = 100 mA,<br>Irr = 0.1 × IR, RL = 100 $\Omega$ |     | 23   |      | ns            |

- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.  
 2. This product is sensitive to electric shock (static electricity, etc.). Due attention must be paid on the charge of a human body and the leakage of current from the operating equipment.  
 3. \*1 trr test circuit





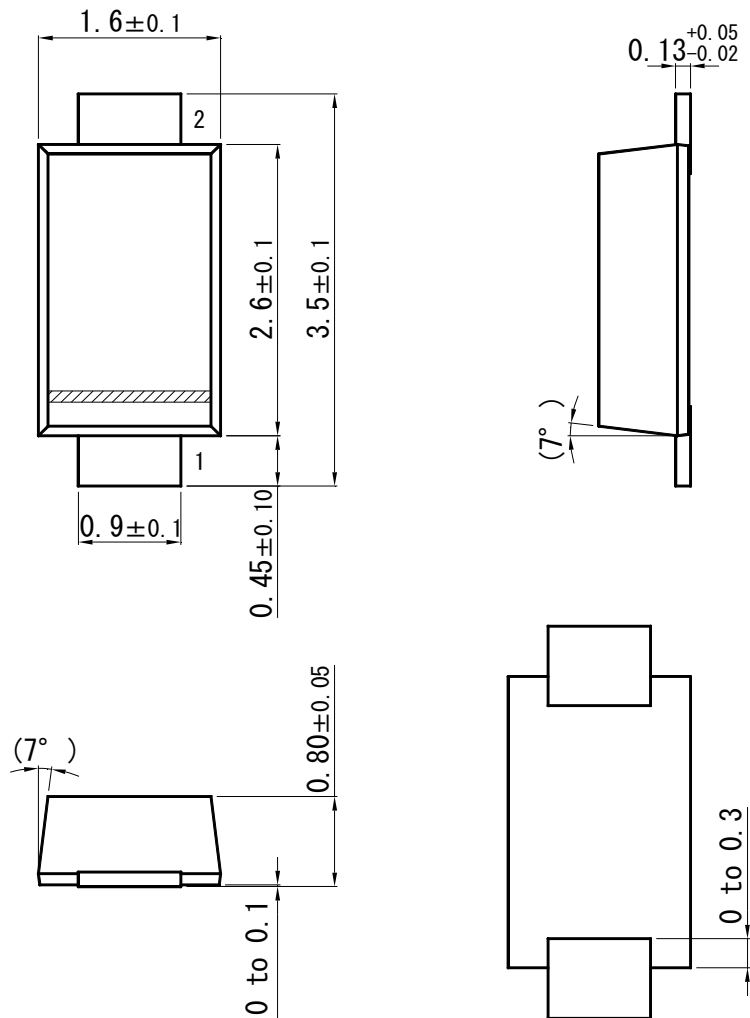
Technical Data ( reference )





### Mini2-F3-B

Unit: mm



#### ■ Land Pattern (Reference) (Unit: mm)



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