Revision. 3

Zener Diode

#### DZ2W09100L

# **Panasonic**

### DZ2W09100L

#### Silicon epitaxial planar type

For constant voltage / For surge absorption circuit DZ24091 in Mini2 type package

#### ■ Features

- · Excellent rising characteristics of zener current Iz
- · Low zener operating resistance Rz
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol: LJ

#### ■ Packaging

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

■ Absolute Maximum Ratings Ta = 25 °C

| Parameter                             | Symbol | Rating      | Unit |
|---------------------------------------|--------|-------------|------|
| Repetitive peak forward current       | IFRM   | 500         | mA   |
| Forward current                       | IF     | 200         | mA   |
| Total power dissipation *1            | PT     | 1           | W    |
| Non-repetitive reverse power surge *2 | PZSM   | 100         | W    |
| Electrostatic discharge *3            | ESD    | ±30         | kV   |
| Junction temperature                  | Tj     | 150         | °C   |
| Operating ambient temperature         | Topr   | -40 to +85  | °C   |
| Storage temperature                   | Tstg   | -55 to +150 | °C   |

Note: \*1 Mounted on ceramics print circuit board.

Board size: 50 mm × 50 mm

Board thickness: 0.8 mm

Soldering size: 2 mm × 2 mm

- \*2 t = 0.1ms
- \*3 Test method:IEC61000\_4\_2(C = 150 pF,R = 330  $\Omega$ , Contact discharge:10 times)

#### ■ Electrical Characteristics Ta = 25 °C ± 3 °C

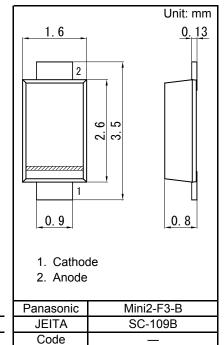
| Parameter                                   | Symbol | Conditions  | Min  | Тур  | Max  | Unit  |
|---|--------|-------------|------|------|------|-------|
| Forward voltage                             | VF     | IF = 200 mA |      |      | 1.2  | V     |
| Zener voltage *1, *2                        | VZ     | IZ = 10 mA  | 8.65 | 9.10 | 9.56 | V     |
| Zener operating resistance                  | RZ     | IZ = 10 mA  |      |      | 30   | Ω     |
| Reverse current                             | IR     | VR = 5.0 V  |      |      | 10   | μA    |
| Temperature coefficient of zener voltage *3 | SZ     | IZ = 10 mA  |      | 5.7  |      | mV/°C |

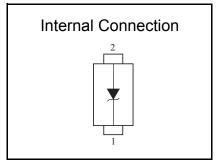
- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.
  - 2. Absolute frequency of input and output is 5 MHz.
  - \*1 The temperature must be controlled 25°C for VZ mesurement.
     VZ value measured at other temperature must be adjusted to VZ (25°C)
    - \*2 VZ guaranted 20 ms after current flow.
    - \*3 Tj = 25°C to 150°C

: 2013-05-08

Established: 2010-12-27

Revised

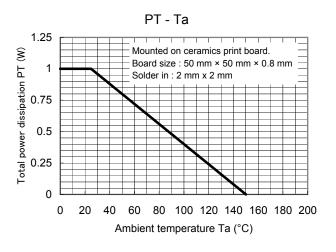


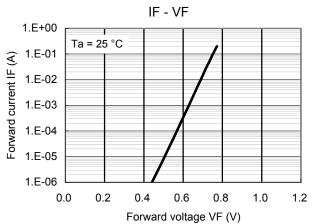


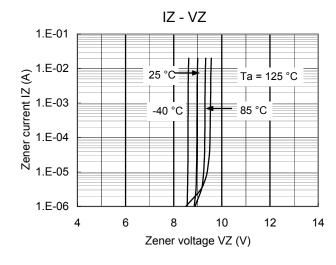
Zener Diode

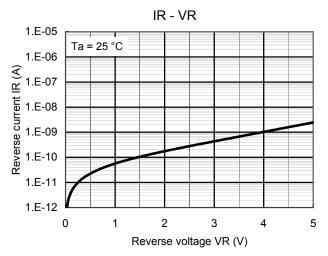
#### DZ2W09100L

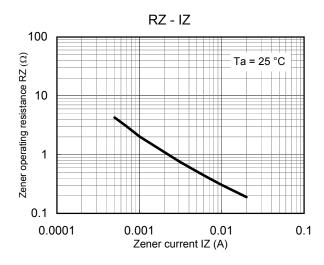
## Technical Data (reference)

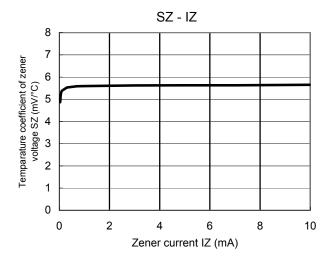












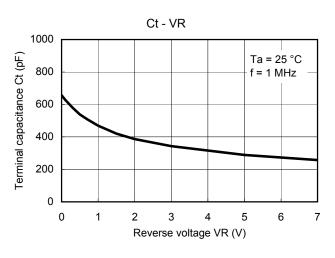
Established: 2010-12-27 Revised: 2013-05-08

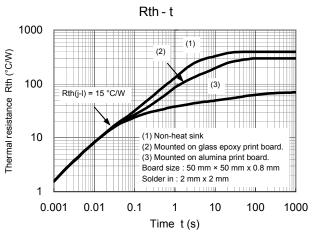
# **Panasonic**

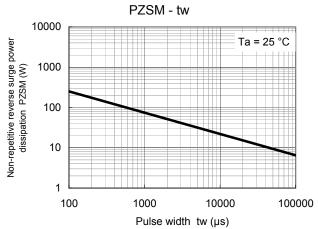
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# Technical Data (reference)







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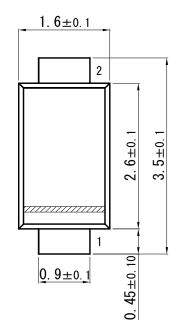
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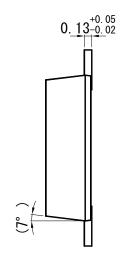
Zener Diode

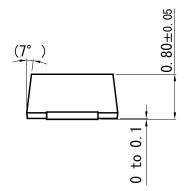
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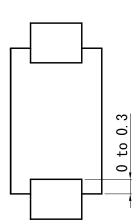
Mini2-F3-B

Unit: mm

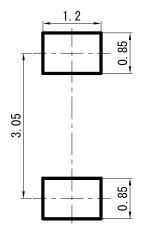








■ Land Pattern (Reference) (Unit: mm)



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