



# DZ2W39000L

Silicon epitaxial planar type

For constant voltage / For surge absorption circuit  
DZ24390 in Mini2 type package

### ■ Features

- Excellent rising characteristics of zener current  $I_Z$
- Low zener operating resistance  $R_Z$
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

### ■ Marking Symbol: LG

### ■ Packaging

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

### ■ Absolute Maximum Ratings $T_a = 25\text{ }^\circ\text{C}$

| Parameter  | Symbol | Rating      | Unit |
|--|--------|-------------|------|
| Repetitive peak forward current                  | IFRM   | 500         | mA   |
| Forward current                                  | IF     | 200         | mA   |
| Total power dissipation <sup>*1</sup>            | PT     | 1           | W    |
| Non-repetitive reverse power surge <sup>*2</sup> | PZSM   | 100         | W    |
| Electrostatic discharge <sup>*3</sup>            | 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  $t = 0.1\text{ms}$

\*3 Test method: IEC61000\_4\_2(C = 150 pF, R = 330 Ω, Contact discharge: 10 times)

### ■ 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 = 200 mA |       |       | 1.2   | V     |
| Zener voltage <sup>*1, *2</sup>                        | VZ     | IZ = 5 mA   | 37.05 | 39.00 | 40.95 | V     |
| Zener operating resistance                             | RZ     | IZ = 5 mA   |       |       | 65    | Ω     |
| Reverse current  | IR     | VR = 31.8 V |       |       | 10    | μA    |
| Temperature coefficient of zener voltage <sup>*3</sup> | SZ     | IZ = 5 mA   |       | 43.0  |       | mV/°C |

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.

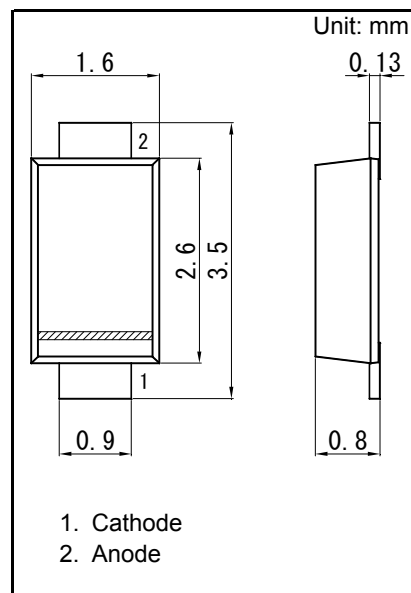
2. Absolute frequency of input and output is 5 MHz.

3. \*1 The temperature must be controlled 25°C for VZ measurement.

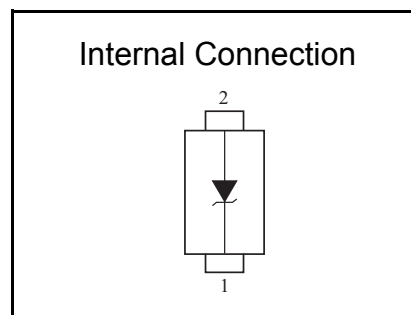
VZ value measured at other temperature must be adjusted to VZ (25°C)

\*2 VZ guaranteed 20 ms after current flow.

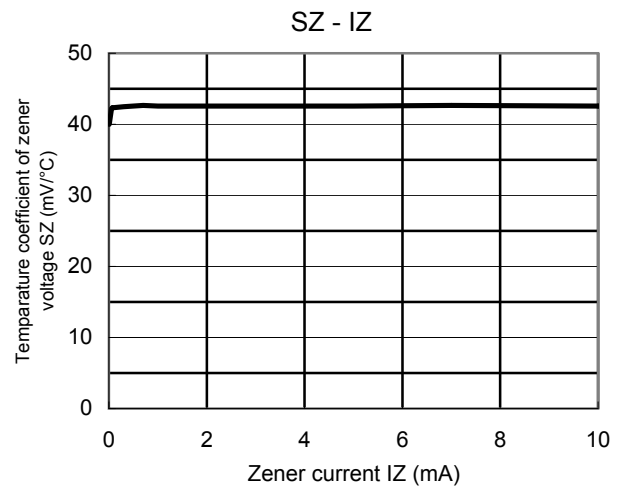
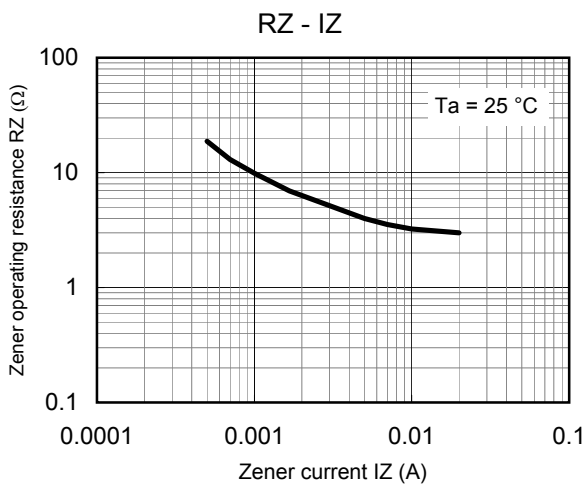
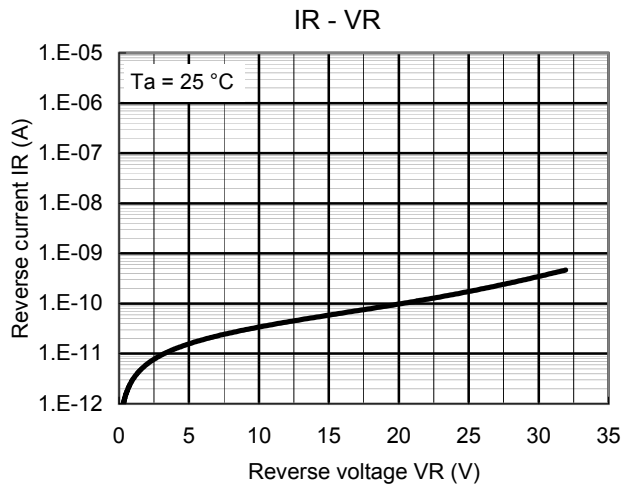
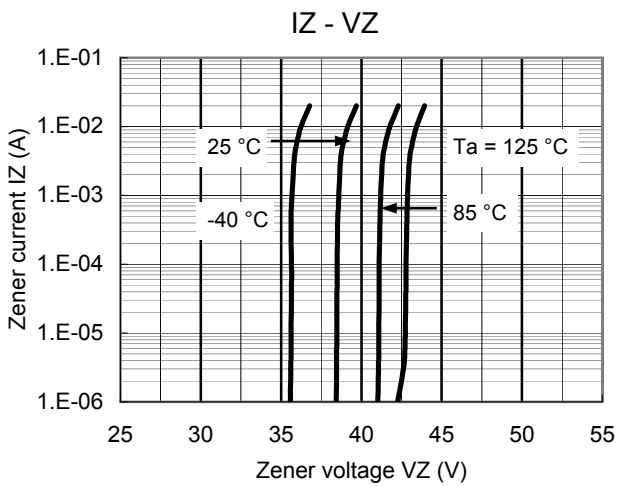
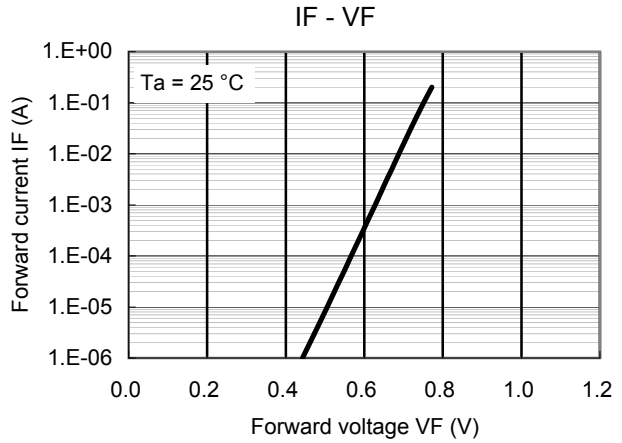
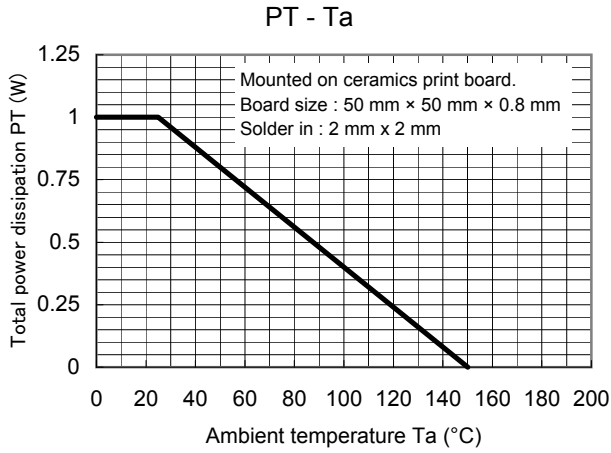
\*3 Tj = 25°C to 150°C



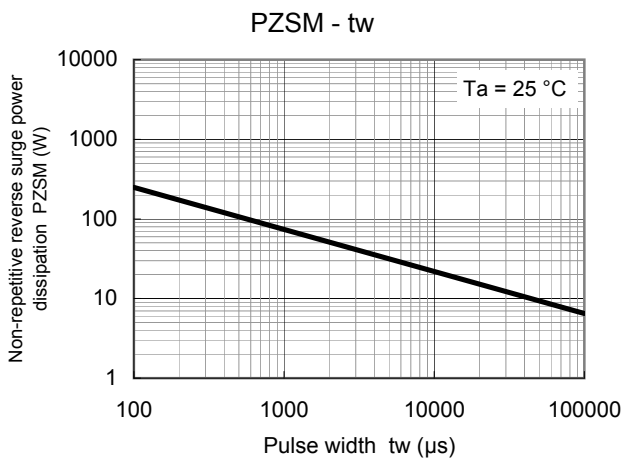
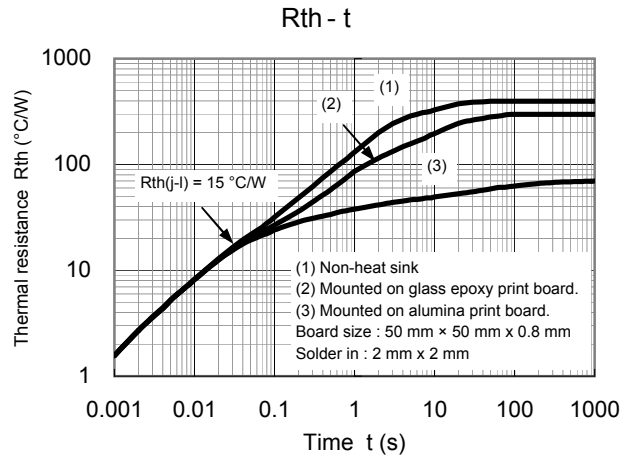
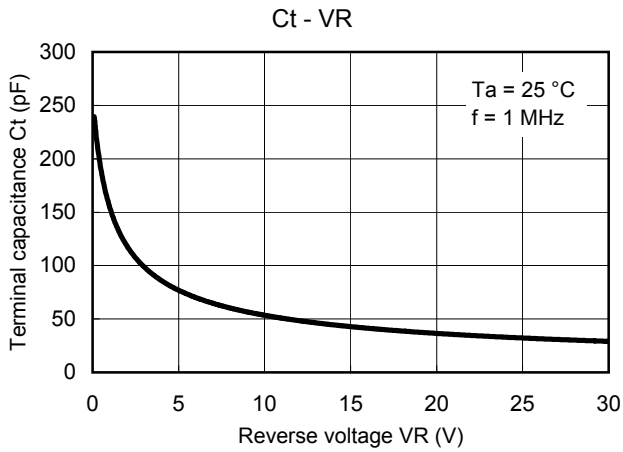
|           |            |
|-----------|------------|
| Panasonic | Mini2-F3-B |
| JEITA     | SC-109B    |
| Code      | —          |



Technical Data ( reference )

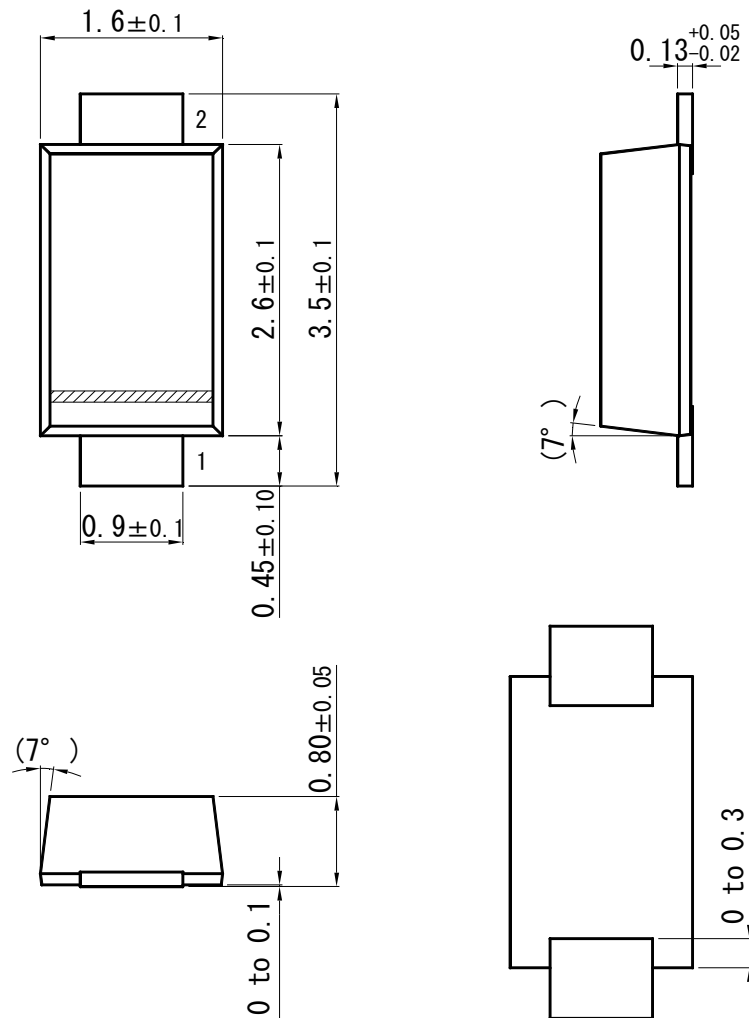


Technical Data ( reference )

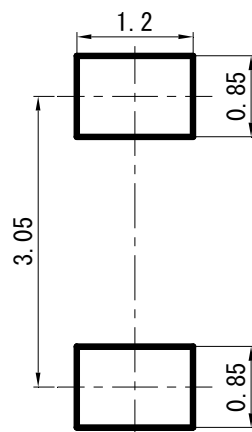


Mini2-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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