

DZ2412000L

Silicon epitaxial planar type

For constant voltage / For surge absorption circuit

Capability of withstanding a high surge type

DZ2W120 in Power 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: RJ

■ 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 | 400 | mA |
| Total power dissipation ^{*1} | PT | 2 | 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 $t = 0.1\text{ms}$

*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 ^{*1, *2} | VZ | IZ = 10 mA | 11.40 | 12.00 | 12.60 | V |
| Zener operating resistance | RZ | IZ = 10 mA | | | 30 | Ω |
| Reverse current | IR | VR = 8.0 V | | | 10 | μA |
| Temperature coefficient of zener voltage ^{*3} | SZ | IZ = 10 mA | | 8.8 | | mV/°C |

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

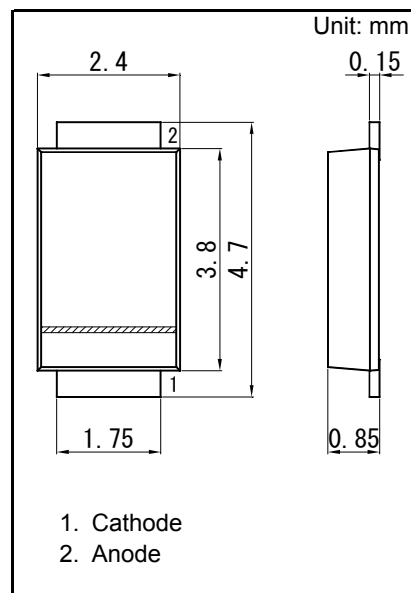
2. Absolute frequency of input and output is 5 MHz.

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.

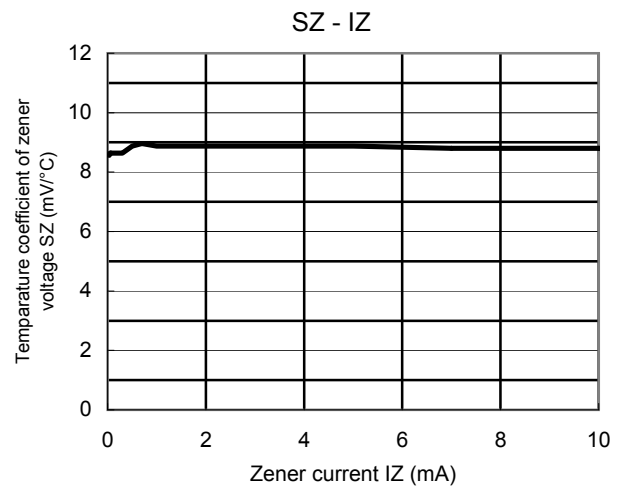
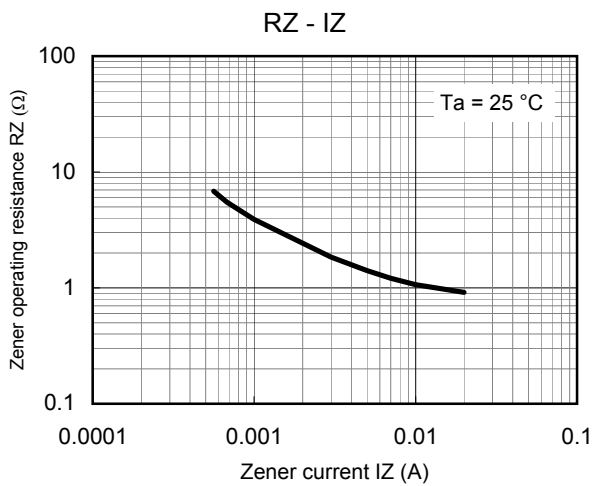
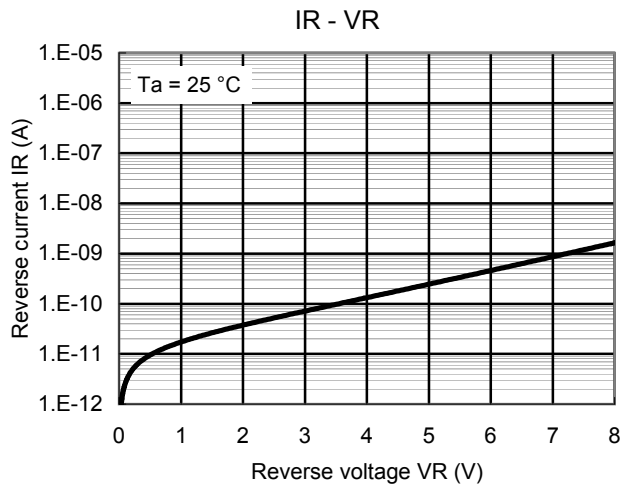
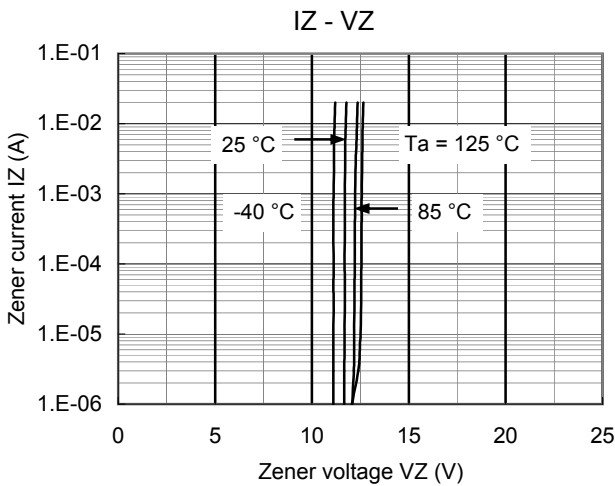
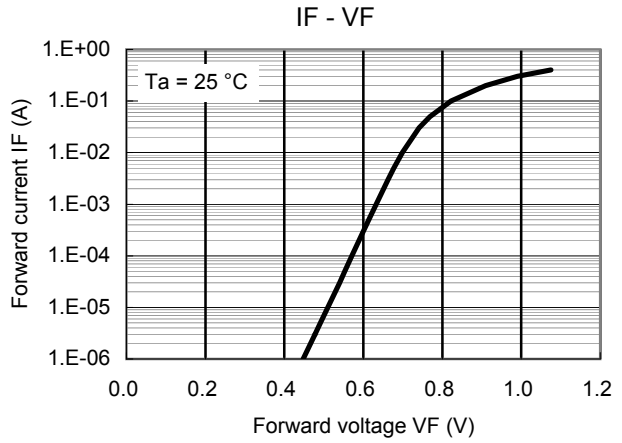
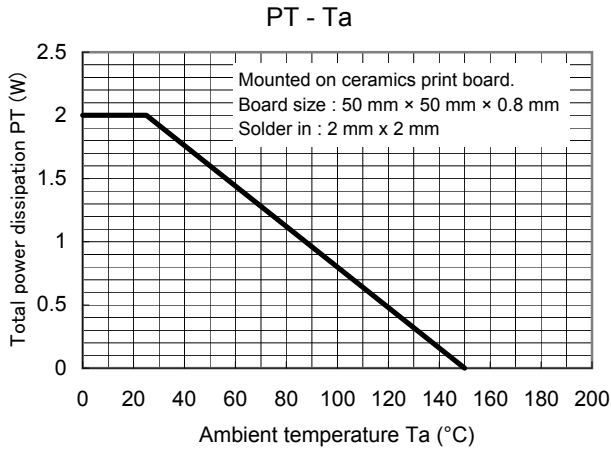
*3 Tj = 25°C to 150°C



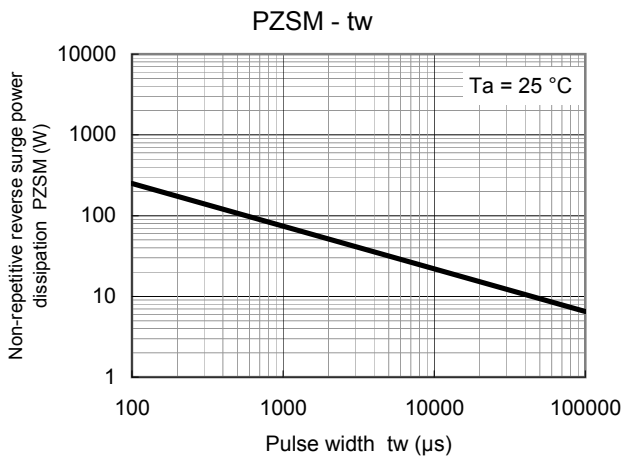
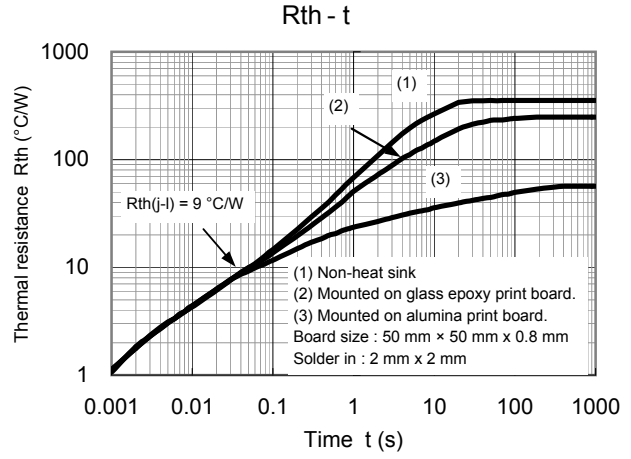
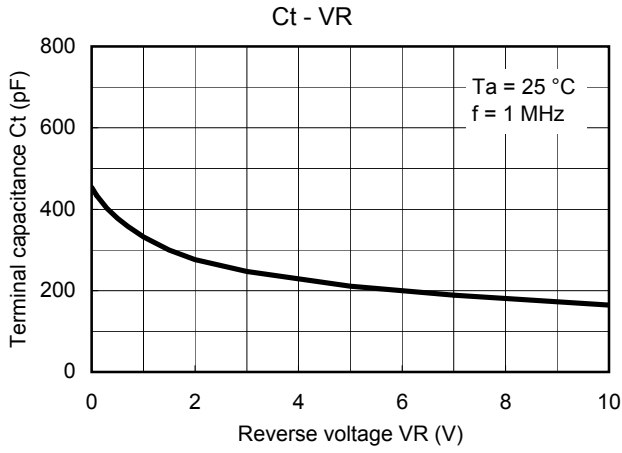
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|-----------|--------------|
| Panasonic | TMiniP2-F2-B |
| JEITA | SC-110A |
| Code | — |



Technical Data (reference)

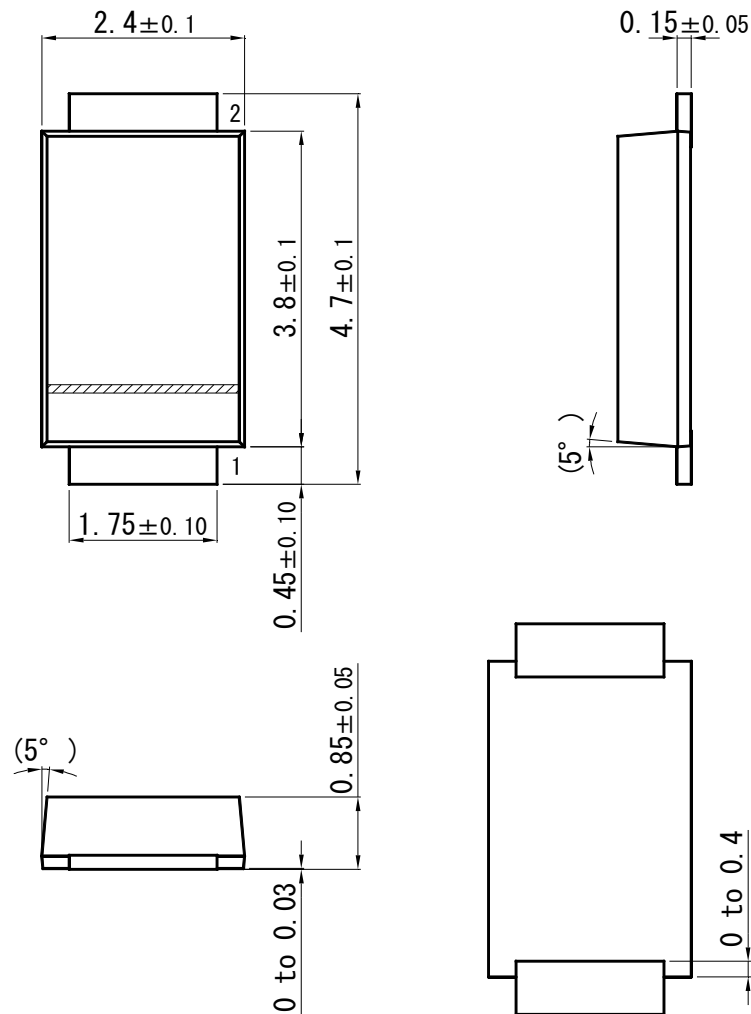


Technical Data (reference)



TMiniP2-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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