Panasonic

Zener Diode

DZ2J051×0L Silicon epitaxial planar type

For constant voltage / For surge absorption circuit

- 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: CJ or CU

Packaging

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

Absolute Maximum Ratings Ta = 25 °C Parameter Symbol

| Repetitive peak forward current | IFRM | 200 | mA | |
|---------------------------------------|------|-------------|----|--|
| Total power dissipation ^{*1} | PT | 200 | mW | |
| Electrostatic discharge *2 | ESD | ±15 | kV | |
| Junction temperature | Tj | 150 | О° | |
| Operating ambient temperature | Topr | -40 to +85 | °C | |
| Storage temperature | Tstg | -55 to +150 | °C | |

Note) *1 Mounted on glass epoxy print board (45 mm × 45 mm × 1 mm) Solder in (Recommended land pattern)

*2 Test method : IEC61000_4_2

(C = 150 pF, R = 330 Ω , Contact discharge : 10 times)

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

| | ±3 C | | | | | |
|---|--------|------------|------|-----|------|-------|
| Parameter | Symbol | Conditions | Min | Тур | Max | Unit |
| Forward voltage | VF | IF = 10 mA | | | 1.0 | V |
| Zener voltage ^{*1, *2} | VZ | IZ = 5 mA | 4.85 | | 5.36 | V |
| Zener operating resistance | RZ | IZ = 5 mA | | | 60 | Ω |
| Zener rise operating resistance | RZK | IZ = 1 mA | | | 500 | Ω |
| Reverse current | IR | VR = 2 V | | | 1.0 | μA |
| Temperature coefficient of zener voltage *3 | SZ | IZ = 5 mA | | 0.7 | | mV/°C |

Rating

Unit

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.

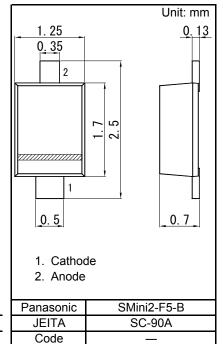
3. *1 The temperature must be controlled 25 °C for VZ mesurement.

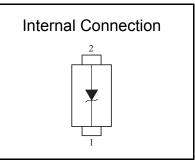
VZ value measured at other temperature must be adjusted to VZ (25 °C).

*2 VZ guaranted 20 ms after current flow Rank classification

| *3 | Tj = 25 °C to 150 °C |) |
|----|----------------------|---|
|----|----------------------|---|

| k classification | | |
|------------------|--------------|--------------|
| Code | М | 0 |
| Rank | М | No-rank |
| VZ | 5.00 to 5.26 | 4.85 to 5.36 |
| Marking symbol | CU | CJ |

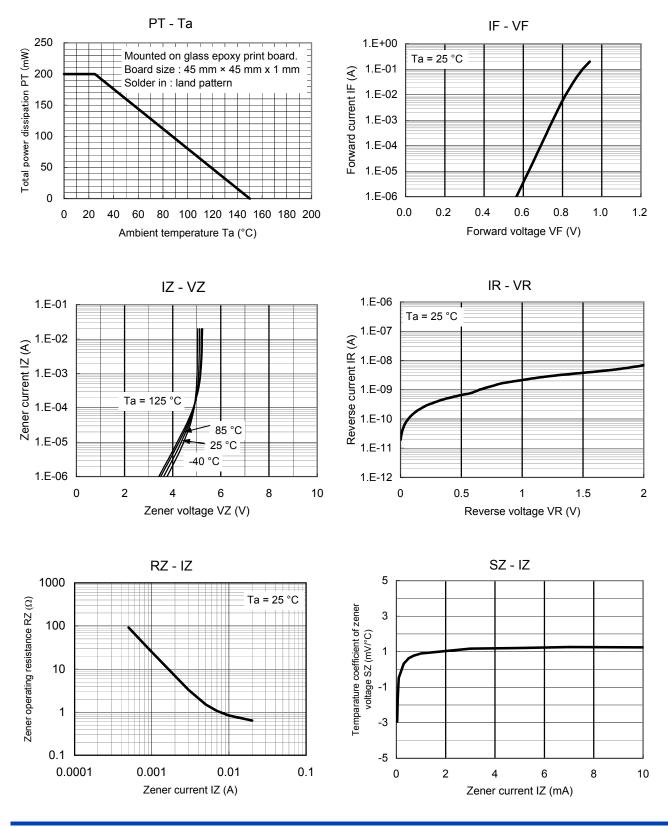






Zener Diode DZ2J051×0L

Technical Data (reference)



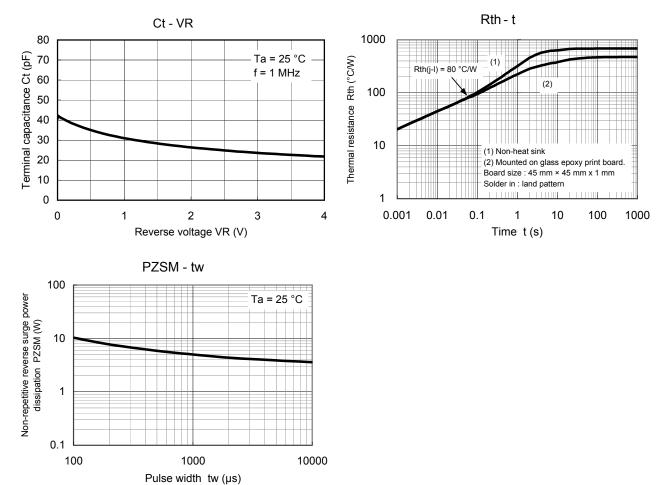
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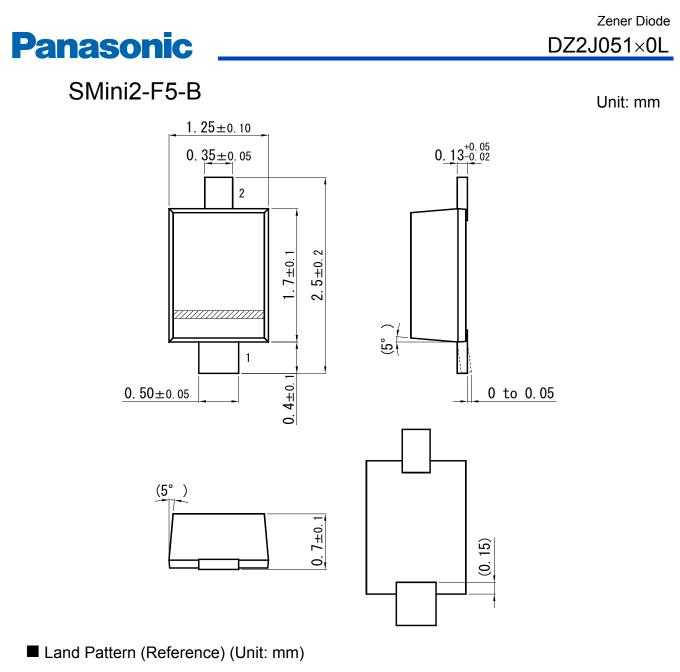
Established : 2009-10-14 Revised : 2013-07-01

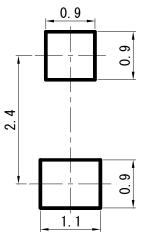


 $\begin{array}{c} \text{Zener Diode} \\ DZ2J051 \times 0L \end{array}$

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