Revision. 3

Zener Diode

DZ2J091×0L

Panasonic

DZ2J091×0L

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: LJ or LU

■ Packaging

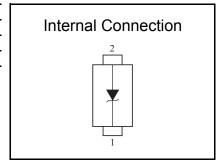
Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings Ta = 25 °C

| Parameter | Symbol | Rating | Unit |
|---------------------------------|--------|-------------|------|
| Repetitive peak forward current | IFRM | 200 | mA |
| Total power dissipation *1 | PT | 200 | mW |
| Electrostatic discharge *2 | ESD | ±8 | 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 glass epoxy print board ($45 \text{ mm} \times 45 \text{ mm} \times 1 \text{ mm}$) 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

| Parameter | Symbol | Conditions | Min | Тур | Max | Unit |
|---|--------|-------------|------|-----|------|-------|
| Forward voltage | VF | IF = 10 mA | | | 1.0 | V |
| Zener voltage *1, *2 | VZ | IZ = 5 mA | 8.65 | | 9.56 | V |
| Zener operating resistance | RZ | IZ = 5 mA | | | 20 | Ω |
| Zener rise operating resistance | RZK | IZ = 0.5 mA | | | 60 | Ω |
| Reverse current | IR | VR = 6 V | | | 0.1 | μΑ |
| Temperature coefficient of zener voltage *3 | SZ | IZ = 5 mA | | 5.8 | | 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 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

Rank classification

| | | | | | | | |
|----------------|--------|---------|---------|---------|--|--|--|
| Code | M M | | 0 | | | | |
| Rank | | | No-rank | | | | |
| VZ | 8.87 | to 9.33 | 8.65 | to 9.56 | | | |
| Marking symbol | LU | | LJ | | | | |

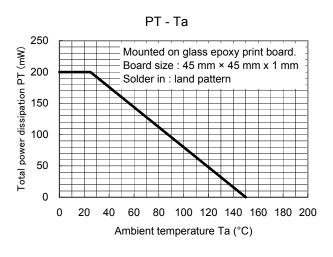
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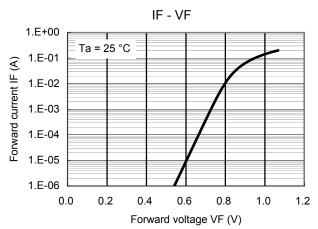
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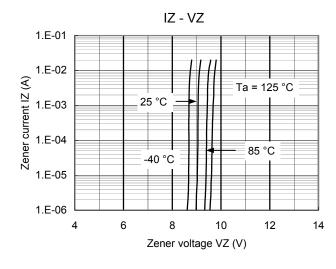
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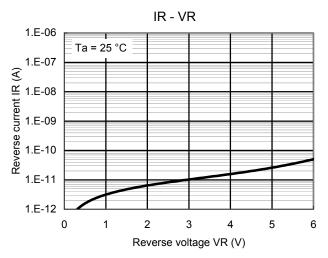
DZ2J091×0L

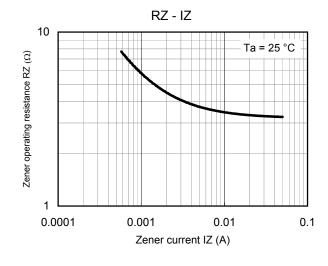
Technical Data (reference)

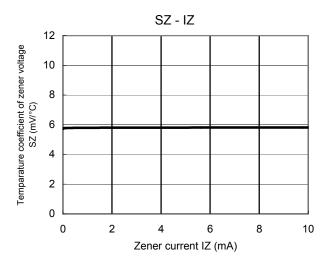










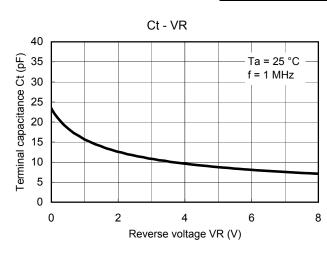


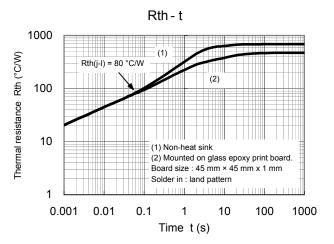
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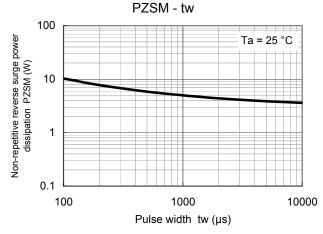
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Technical Data (reference)







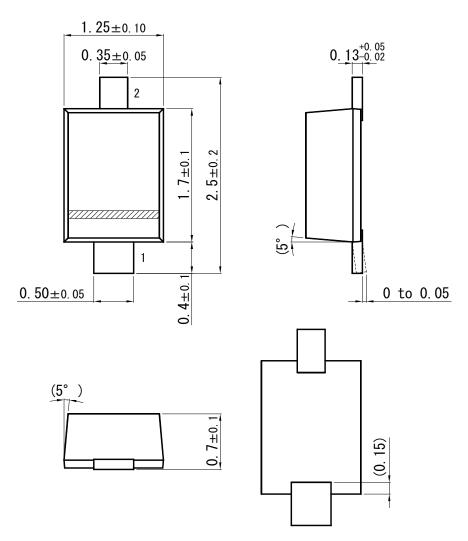
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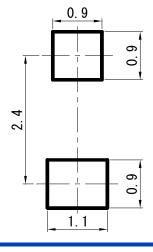
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SMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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