

## DZ4J120K0R

## Silicon epitaxial planar type

For constant voltage / For surge absorption circuit

### ■ 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

### ■ Basic Part Number :

Dual DZ2J120 (Parallel)

### ■ 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   | 200         | mA   |
| Total power dissipation <sup>*1</sup> | PT     | 200         | mW   |
| Electrostatic discharge <sup>*2</sup> | 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 mm x 45 mm x 1 mm)

Solder in ( 0.8 mm x 0.8 mm)

\*2: Test method: IEC61000\_4\_2(C = 150 pF, R = 330  $\Omega$ , 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 = 10 mA  |       |     | 1.0   | V             |
| Zener voltage <sup>*1, *2</sup>                        | VZ     | IZ = 5 mA   | 11.40 |     | 12.60 | V             |
| Zener operating resistance                             | RZ     | IZ = 5 mA   |       |     | 30    | $\Omega$      |
| Zener rise operating resistance                        | RZK    | IZ = 0.5 mA |       |     | 80    | $\Omega$      |
| Reverse current                                        | IR     | VR = 9 V    |       |     | 0.05  | $\mu\text{A}$ |
| Temperature coefficient of zener voltage <sup>*3</sup> | SZ     | IZ = 5 mA   |       | 9.3 |       | mV/°C         |

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

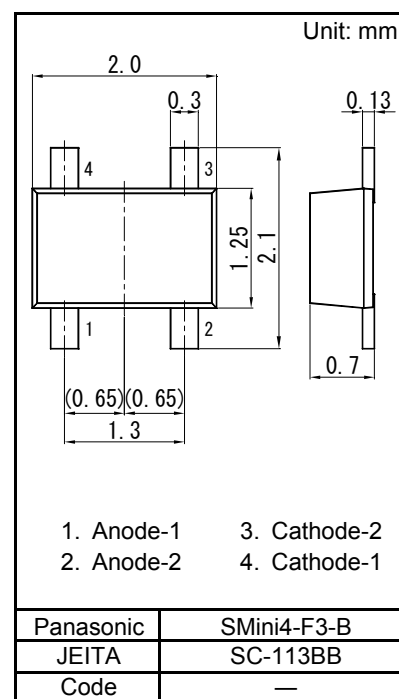
2. Absolute frequency of input and output is 5 MHz.

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



### Internal Connection

