

Zener Diode  
**DZ4J220K0R**



# DZ4J220K0R

Silicon epitaxial planar type

For constant voltage / For surge absorption circuit

■ Features

- Excellent rising characteristics of zener current I<sub>Z</sub>
- Low zener operating resistance R<sub>Z</sub>
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Marking Symbol: CG

■ Basic Part Number :  
Dual DZ2J220 (Parallel)

■ 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 <sup>*1</sup> | PT             | 200         | mW   |
| Electrostatic discharge <sup>*2</sup> | ESD            | ±8          | kV   |
| Junction temperature                  | T <sub>j</sub> | 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 Ω, Contact discharge:10 times)

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

| Parameter  | Symbol          | Conditions              | Min   | Typ  | Max   | Unit  |
|--|-----------------|-------------------------|-------|------|-------|-------|
| Forward voltage  | V <sub>F</sub>  | I <sub>F</sub> = 10 mA  |       |      | 1.0   | V     |
| Zener voltage <sup>*1, *2</sup>                        | V <sub>Z</sub>  | I <sub>Z</sub> = 5 mA   | 20.90 |      | 23.10 | V     |
| Zener operating resistance                             | R <sub>Z</sub>  | I <sub>Z</sub> = 5 mA   |       |      | 80    | Ω     |
| Zener rise operating resistance                        | R <sub>ZK</sub> | I <sub>Z</sub> = 0.5 mA |       |      | 100   | Ω     |
| Reverse current  | I <sub>R</sub>  | V <sub>R</sub> = 17 V   |       |      | 0.05  | μA    |
| Temperature coefficient of zener voltage <sup>*3</sup> | SZ              | I <sub>Z</sub> = 5 mA   |       | 22.2 |       | mV/°C |

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

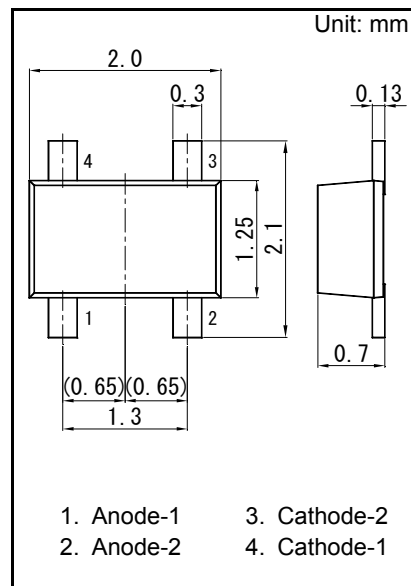
2. Absolute frequency of input and output is 5 MHz.

3. \*1: The temperature must be controlled 25 °C for V<sub>Z</sub> measurement.

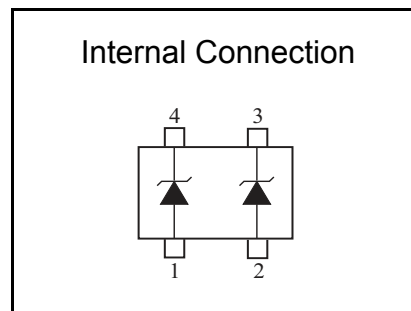
V<sub>Z</sub> value measured at other temperature must be adjusted to V<sub>Z</sub> (25 °C)

\*2: V<sub>Z</sub> guaranteed 20 ms after current flow.

\*3: T<sub>j</sub> = 25 °C to 150 °C



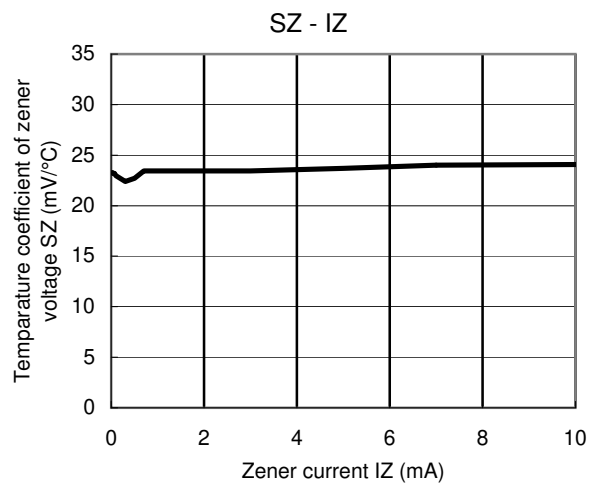
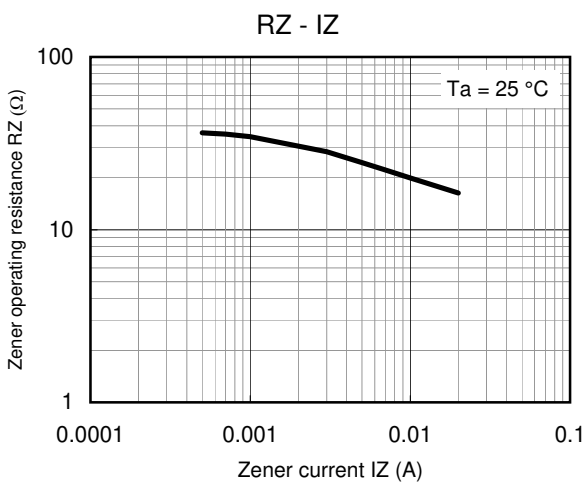
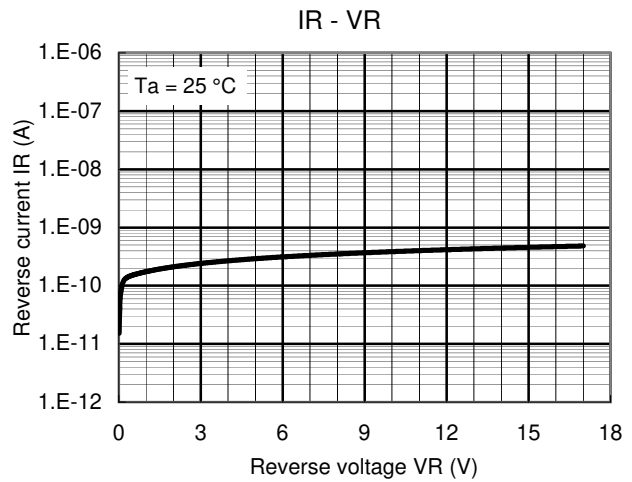
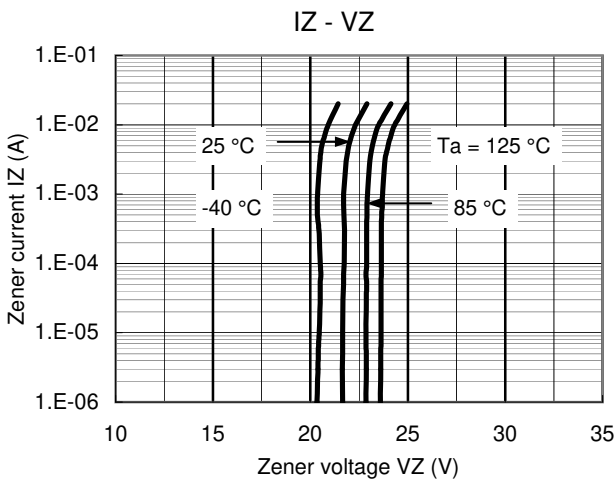
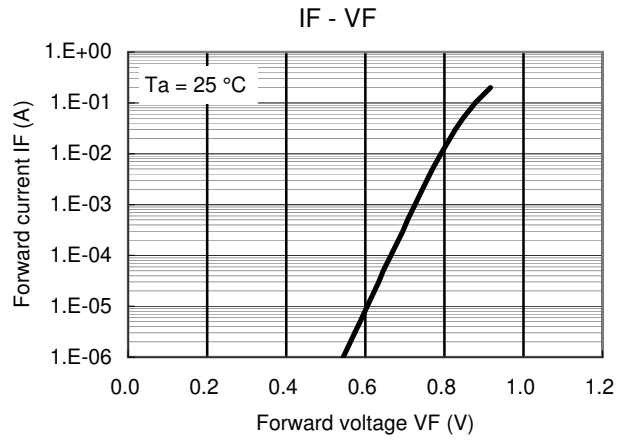
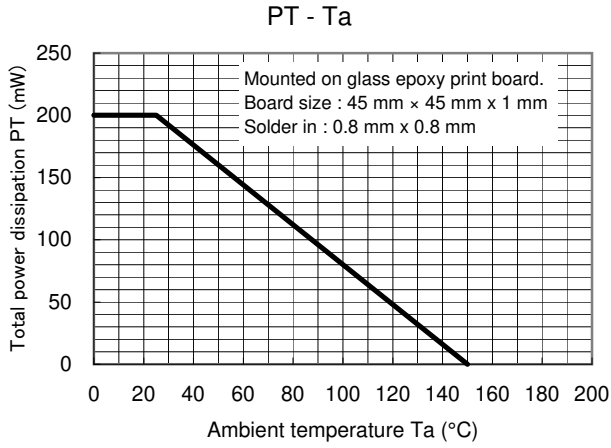
|           |             |
|-----------|-------------|
| Panasonic | SMini4-F3-B |
| JEITA     | SC-113BB    |
| Code      | —           |





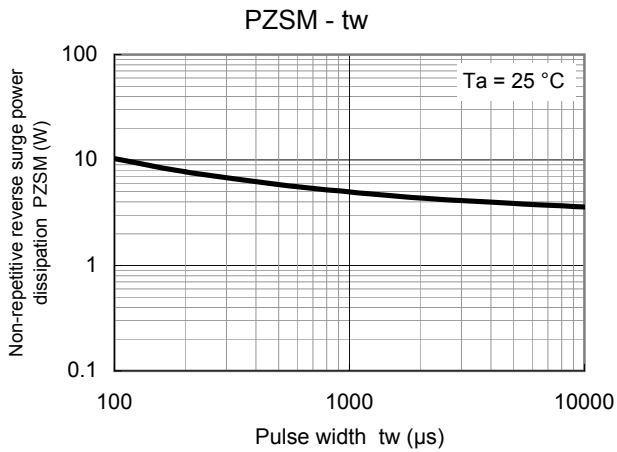
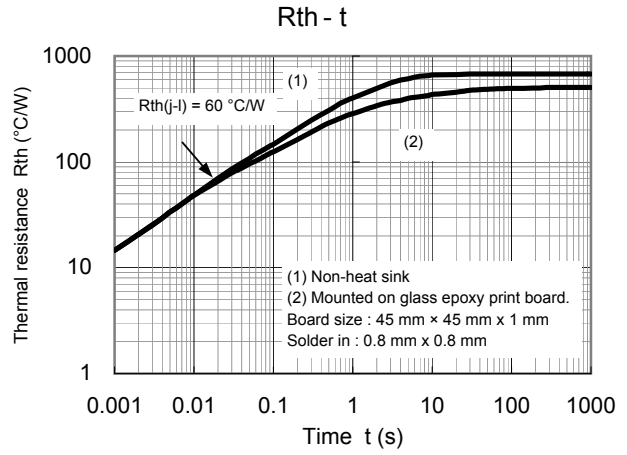
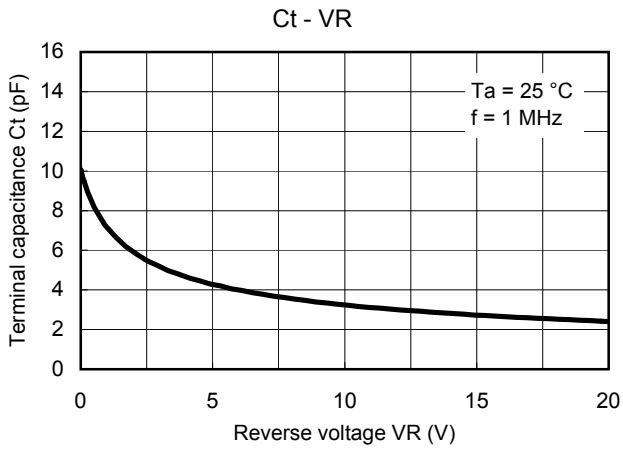
Zener Diode  
 DZ4J220K0R

Technical Data ( reference )





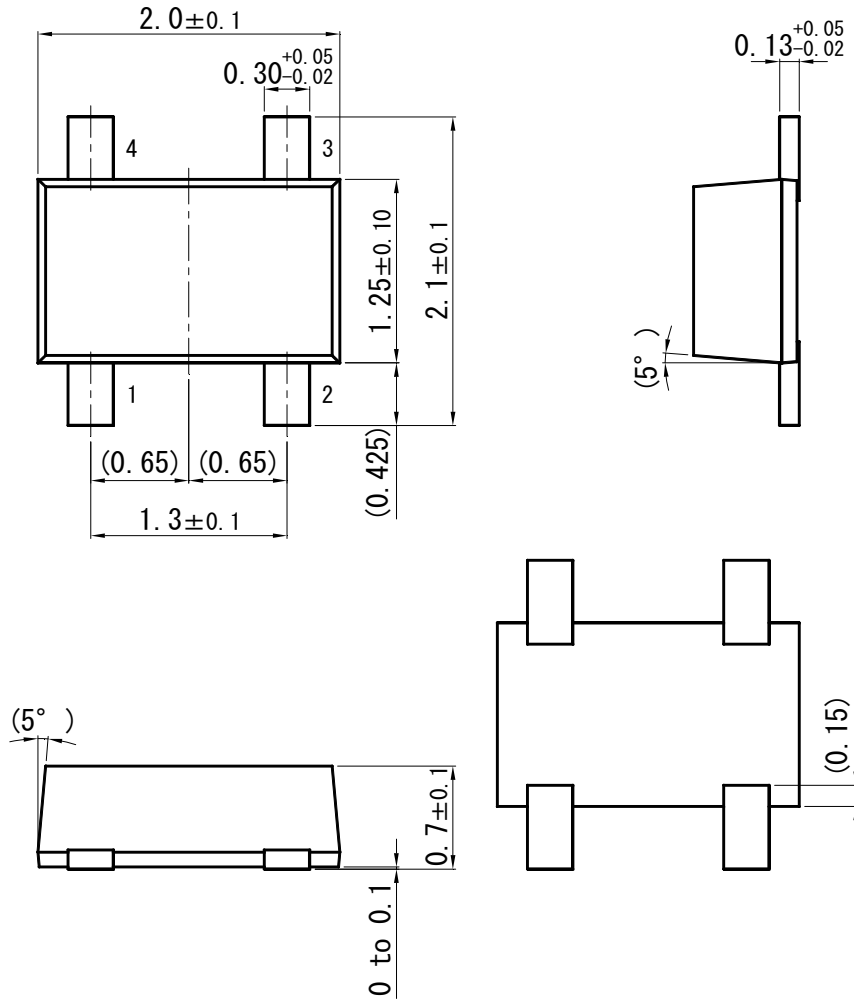
Technical Data ( reference )



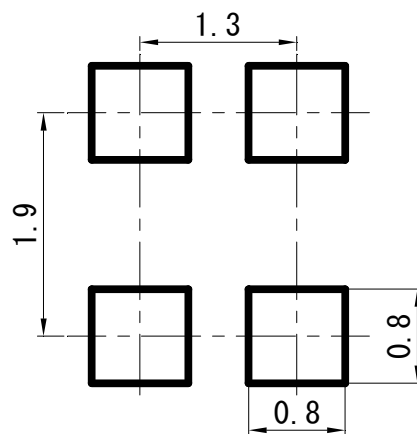


### SMini4-F3-B

Unit: mm



#### ■ Land Pattern (Reference) (Unit: mm)



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