



# 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	T <sub>opr</sub>	-40 to +85	°C
Storage temperature	T <sub>stg</sub>	-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.

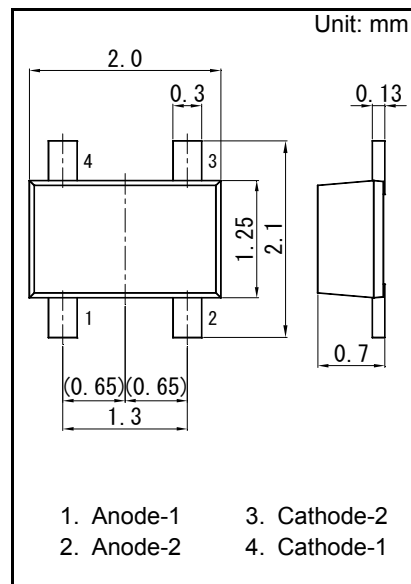
2. Absolute frequency of input and output is 5 MHz.

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.

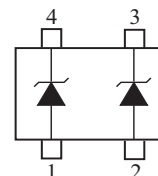
\*3: T<sub>j</sub> = 25 °C to 150 °C



1. Anode-1      3. Cathode-2  
2. Anode-2      4. Cathode-1

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

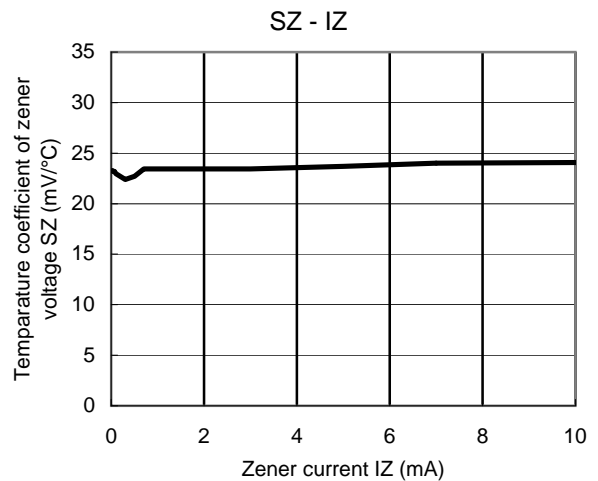
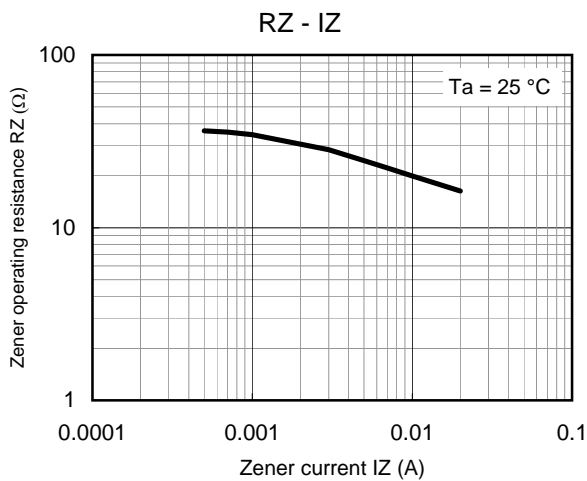
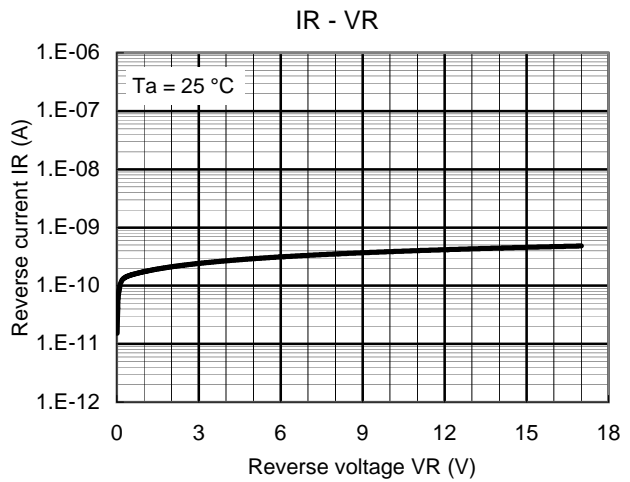
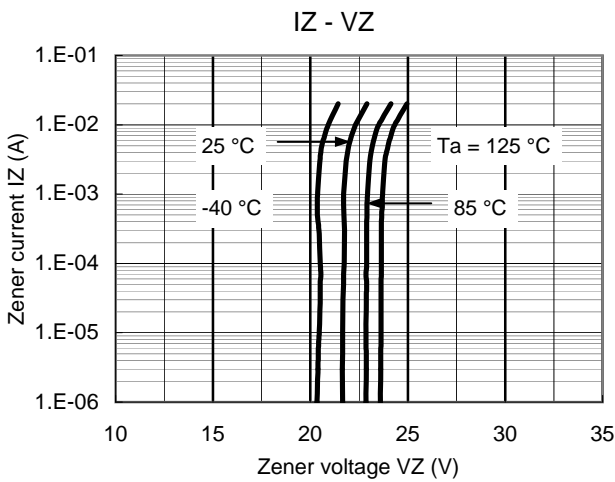
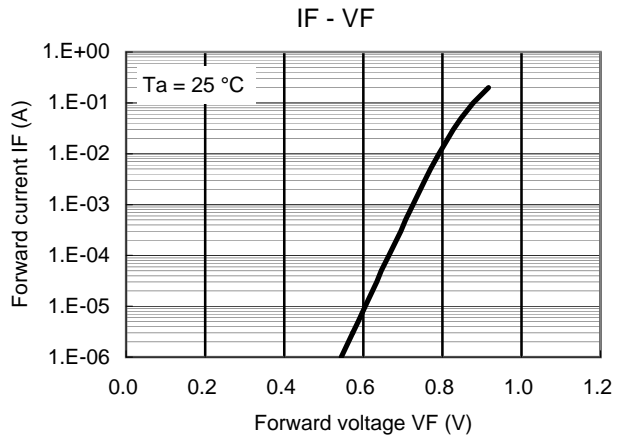
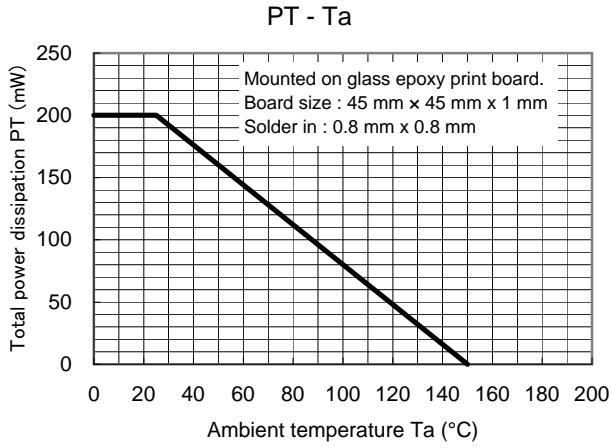
### Internal Connection





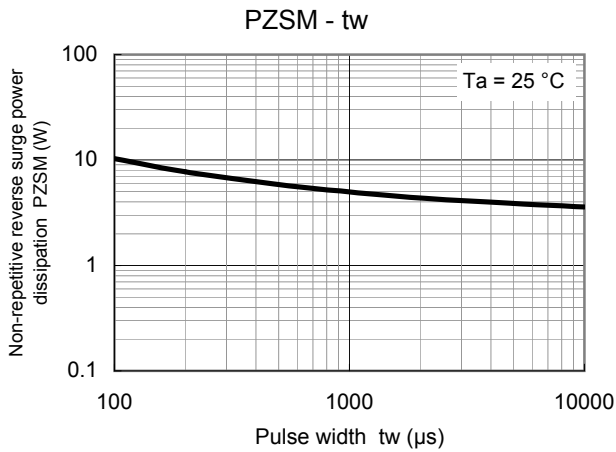
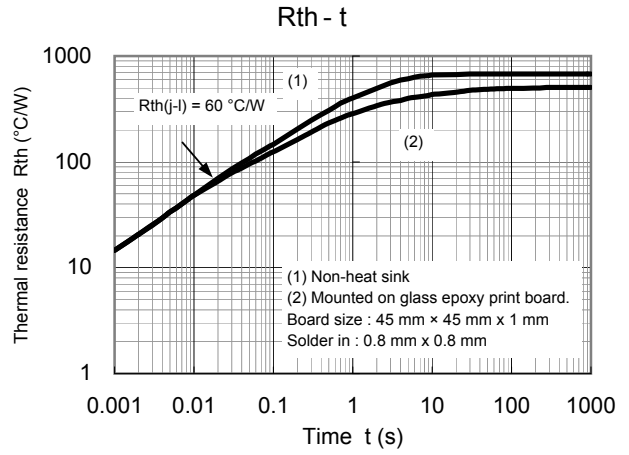
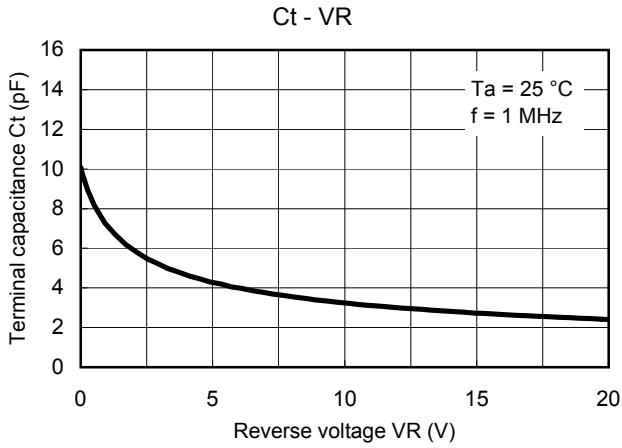
Zener Diode  
 DZ4J220K0R

Technical Data ( reference )





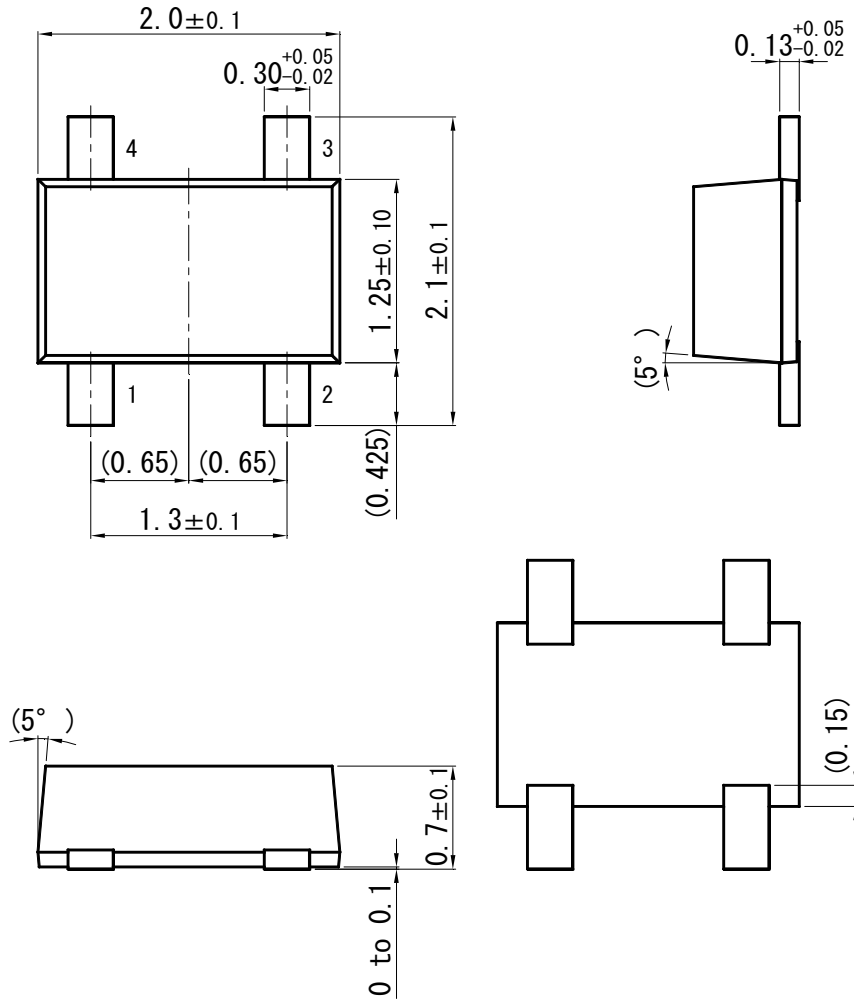
Technical Data ( reference )



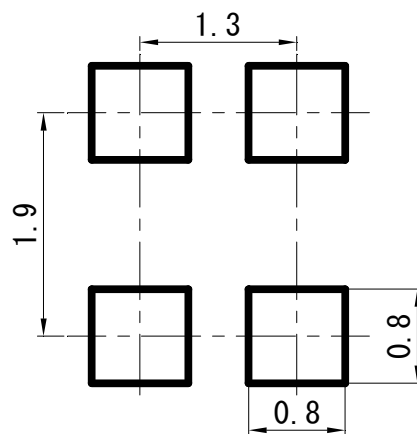


### SMini4-F3-B

Unit: mm



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



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