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# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







Revision. 3

Zener Diode

DZ2J220×0L

# **Panasonic**

### DZ2J220×0L

#### 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: CG or CR

#### ■ Packaging

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

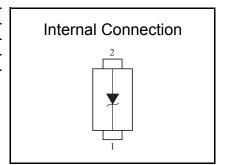
■ Absolute Maximum Ratings Ta = 25 °C

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  $\Omega$ , Contact discharge : 10 times )

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#### ■ 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	20.90		23.10	V
Zener operating resistance	RZ	IZ = 5 mA			80	Ω
Zener rise operating resistance	RZK	IZ = 0.5 mA			100	Ω
Reverse current	IR	VR = 17 V			0.05	μΑ
Temperature coefficient of zener voltage *3	SZ	IZ = 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 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	0					
Rank	M		No-rank					
VZ	21.45	to 22.55	20.90	to 23.10				
Marking symbol	CR		CG					

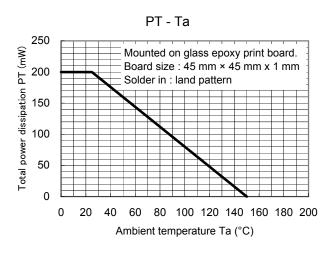
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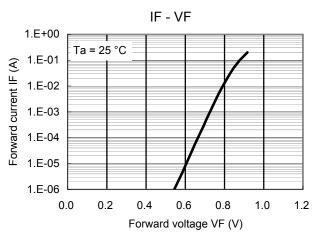
Established: 2009-10-14 Revised: 2013-07-12

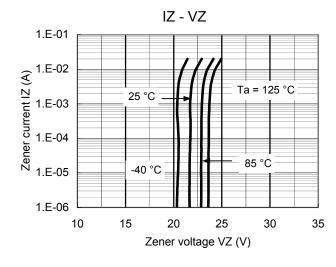
Zener Diode

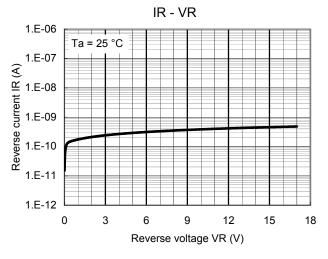
DZ2J220×0L

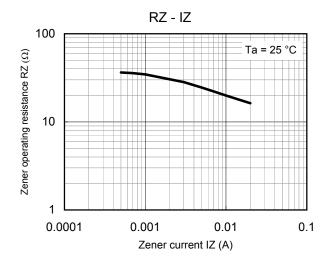
## Technical Data (reference)

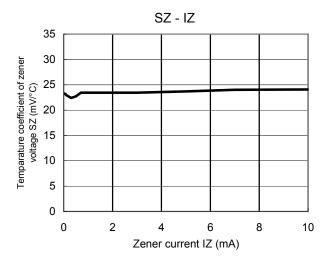










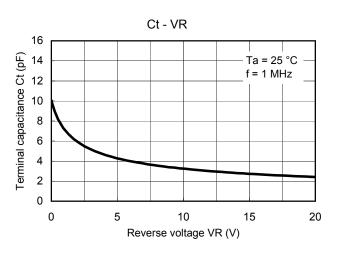


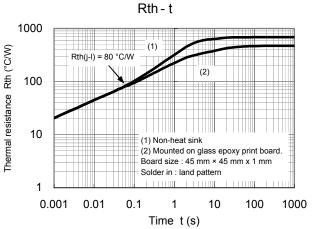
Established: 2009-10-14 Revised: 2013-07-12 **Panasonic** 

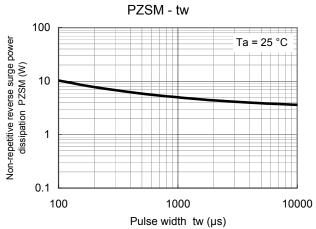
Zener Diode

## DZ2J220×0L

# Technical Data ( reference )







Established: 2009-10-14

Revised

: 2013-07-12

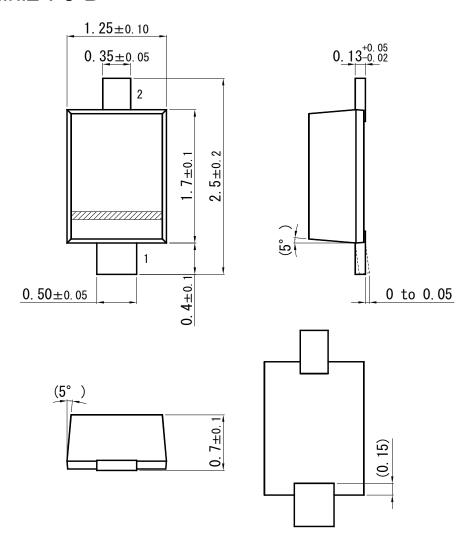
**Panasonic** 

Zener Diode

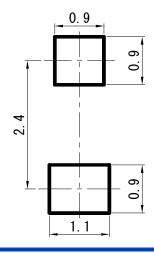
## DZ2J220×0L

# SMini2-F5-B

Unit: mm



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



Established: 2009-10-14 Revised: 2013-07-12

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