# **DZ2J220**

# 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)

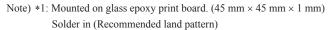
### ■ Marking Symbol: CG, CR

### ■ Packaging

DZ2J220×0L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit
Repetitive peak forward current	$I_{FRM}$	200	mA
Total power dissipation *1	P <sub>T</sub>	200	mW
Electrostatic discharge *2	ESD	±8	kV
Junction temperature	T <sub>j</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C



<sup>\*2:</sup> Test method:IEC61000-4-2 (C = 150 pF, R = 330  $\Omega$ , Contact discharge:10 times)

# Unit: mm 1. 25 0. 35 2 2 1: Cathode 2: Anode Panasonic JEITA SC-90A Code Unit: mm 0. 13 0. 13 0. 7 0. 7 1. Cathode 2. SMini2-F5-B SC-90A Code —

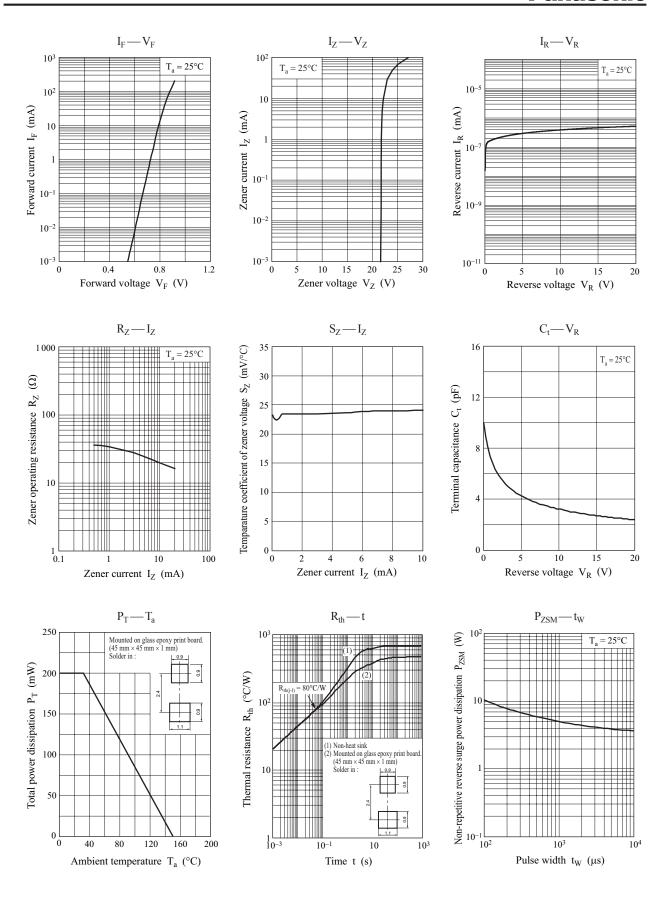
### ■ Common Electrical Characteristics $T_a = 25$ °C±3°C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V <sub>F</sub>	$I_F = 10 \text{ mA}$			1.0	V
Zener voltage *1, 2, 4	Vz	$I_Z = 5 \text{ mA}$	20.90		23.10	V
Zener operating resistance	$R_Z$	$I_Z = 5 \text{ mA}$			80	Ω
Zener rise operating resistance	R <sub>ZK</sub>	$I_Z = 0.5 \text{ mA}$			100	Ω
Reverse current	$I_R$	$V_R = 17 V$			0.05	μΑ
Temperature coefficient of zener voltage *3	$S_Z$	$I_Z = 5 \text{ mA}$		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  $V_Z$  measurement.  $V_Z$  value measured at other temperature must be adjusted to  $V_Z$  (25°C)
  - \*2: V<sub>Z</sub> guaranteed 20 ms after current flow.
  - \*3:  $T_i = 25^{\circ}C$  to  $150^{\circ}C$
  - \*4: Rank classification

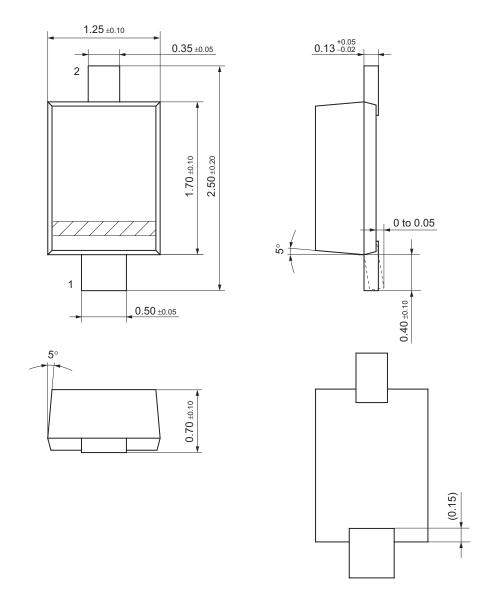
Code	М	0	
Rank	М	No-rank	
$V_Z$	21.45 to 22.55	20.90 to 23.10	
Marking Symbol	CR	CG	



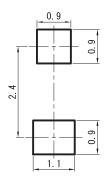
2 Ver. DED

SMini2-F5-B

Unit: mm



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



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