# DZ2J033

### Silicon epitaxial planar type

For constant voltage / For surge absorption circuit

#### Features

- $\bullet$  Excellent rising characteristics of zener current  $I_{\rm z}$
- Low zener operating resistance R<sub>Z</sub>
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

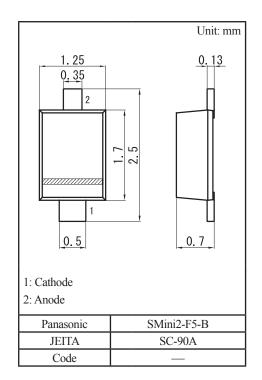
#### Marking Symbol: 5J, 5U

#### Packaging

DZ2J033×0L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

#### Absolute Maximum Ratings $T_a = 25^{\circ}C$

Parameter	Symbol	Rating	Unit
Repetitive peak forward current	I <sub>FRM</sub>	200	mA
Total power dissipation *1	P <sub>T</sub>	200	mW
Electrostatic discharge *2	ESD	±15	kV
Junction temperature	Tj	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C



Note) \*1: Mounted on glass epoxy print board. (45 mm  $\times$  45 mm  $\times$  1 mm)

Solder in (Recommended land pattern)

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

#### Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	V <sub>F</sub>	$I_{\rm F} = 10  {\rm mA}$			1.0	V
Zener voltage *1, 2, 4	Vz	$I_Z = 5 \text{ mA}$	3.14		3.47	V
Zener operating resistance	R <sub>Z</sub>	$I_Z = 5 \text{ mA}$			130	Ω
Reverse current	I <sub>R</sub>	$V_R = 1 V$			20	μΑ
Temperature coefficient of zener voltage *3	SZ	$I_Z = 5 \text{ mA}$		-2.1		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.

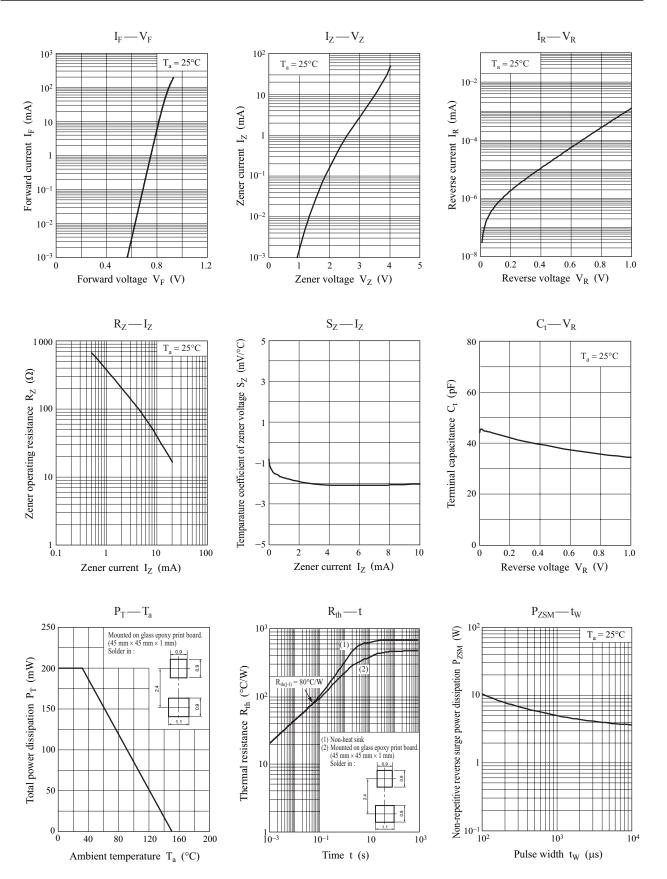
3. \*1: The temperature must be controlled 25°C for  $V_Z$  measurement.  $V_Z$  value measured at other temperature must be adjusted to  $V_Z$  (25°C) \*2:  $V_Z$  guaranteed 20 ms after current flow.

\*3:  $T_i = 25^{\circ}C$  to  $150^{\circ}C$ 

\*4: Rank classification

Code	М	0
Rank	М	No-rank
Vz	3.22 to 3.38	3.14 to 3.47
Marking Symbol	5U	5J

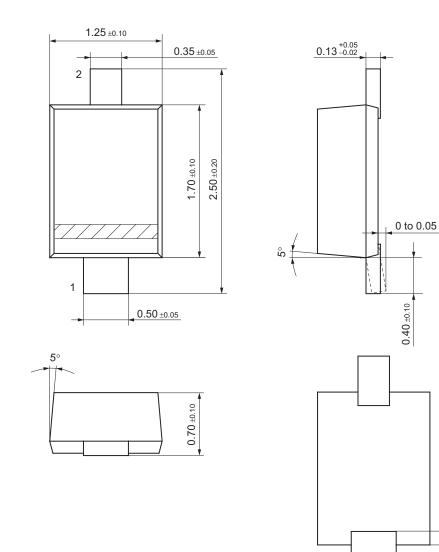
### **Panasonic**



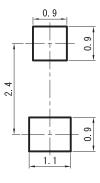
### SMini2-F5-B

Unit: mm

(0.15)



Land Pattern (Reference) (Unit: mm)



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