Zener Diode

DZ2J033×0L

# **Panasonic**

### DZ2J033×0L

## 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: 5J or 5U

#### ■ Packaging

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

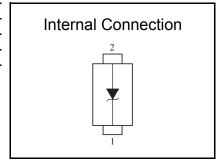
■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit
Repetitive peak forward current	IFRM	200	mA
Total power dissipation *1	PT	200	mW
Electrostatic discharge *2	ESD	±15	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 )

## 



#### ■ 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	3.14		3.47	V
Zener operating resistance	RZ	IZ = 5  mA			130	Ω
Reverse current	IR	VR = 1 V			20	μΑ
Temperature coefficient of zener voltage *3	SZ	IZ = 5 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.
  - \*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

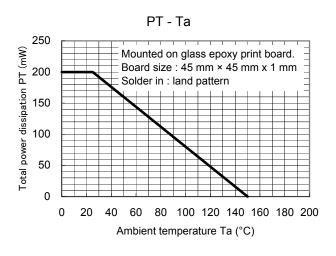
Code	M		0			
Rank	M			No-rank		
VZ	3.22	to	3.38	3.14	to	3.47
Marking symbol		5U			5J	

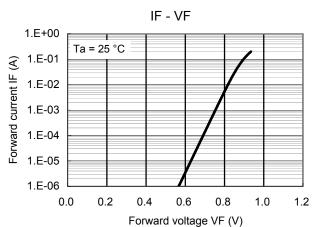
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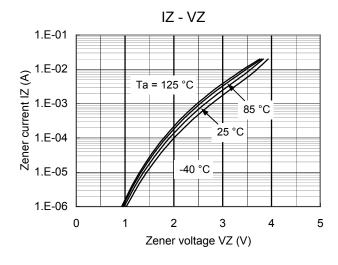
Zener Diode

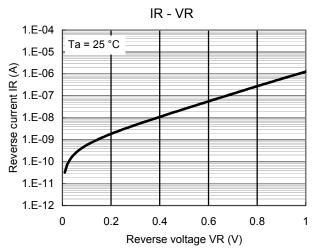
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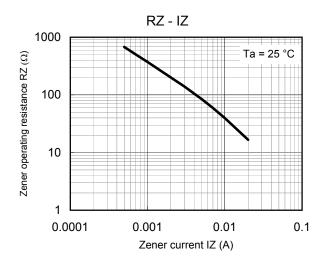
## Technical Data (reference)

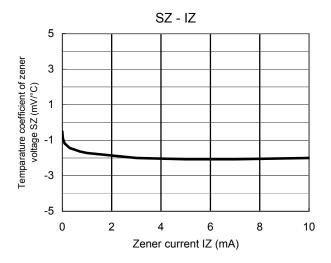












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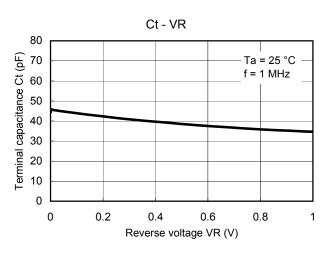
Revision. 3

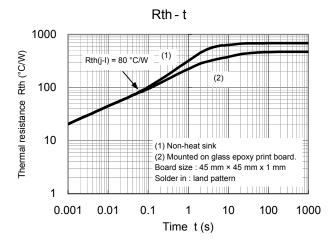
**Panasonic** 

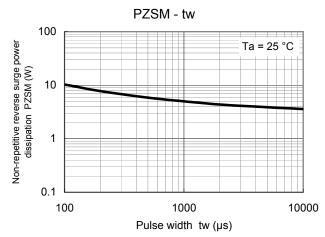
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## Technical Data (reference)







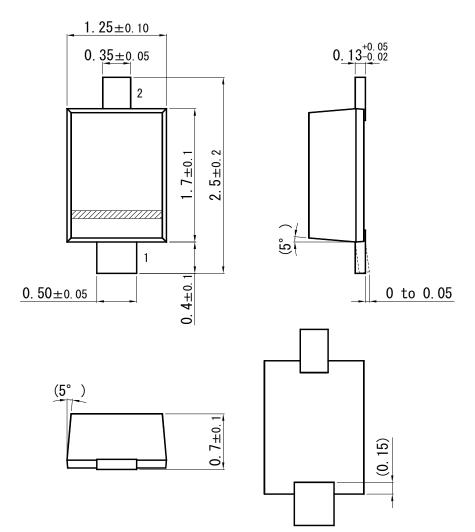
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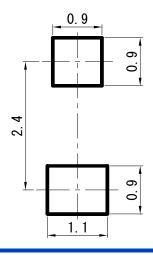
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SMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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