Zener Diode

DZ2413000L

## **Panasonic**

## DZ2413000L

### Silicon epitaxial planar type

For constant voltage / For surge absorption circuit Capability of withstanding a high surge type DZ2W130 in Power type package

#### ■ 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: SJ

#### ■ 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	500	mA
Forward current	IF	400	mA
Total power dissipation *1	PT	2	W
Non-repetitive reverse power surge *2	PZSM	100	W
Electrostatic discharge *3	ESD	±30	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 ceramics print circuit board.

Board size: 50 mm × 50 mm Board thickness: 0.8 mm Soldering size: 2 mm × 2 mm

- \*2 t = 0.1ms
- \*3 Test method:IEC61000\_4\_2(C = 150 pF,R = 330  $\Omega$ , Contact discharge:10 times)

#### ■ Electrical Characteristics Ta = 25 °C ± 3 °C

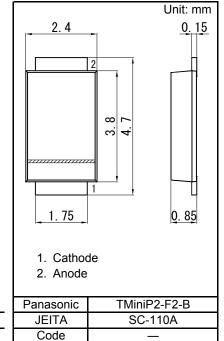
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	VF	IF = 200 mA			1.2	V
Zener voltage *1, *2	VZ	IZ = 10 mA	12.35	13.00	13.65	V
Zener operating resistance	RZ	IZ = 10 mA			30	Ω
Reverse current	IR	VR = 9.0 V			10	μA
Temperature coefficient of zener voltage *3	SZ	IZ = 10 mA		10.5		mV/°C

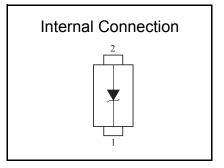
- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.
  - 2. Absolute frequency of input and output is 5 MHz.
  - \*1 The temperature must be controlled 25°C for VZ mesurement.
     VZ value measured at other temperature must be adjusted to VZ (25°C)
    - \*2 VZ guaranted 20 ms after current flow.
    - \*3 Tj = 25°C to 150°C

: 2013-05-08

Established: 2011-09-09

Revised

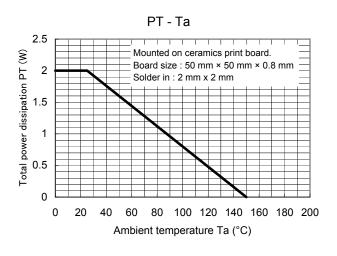


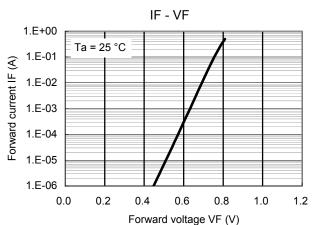


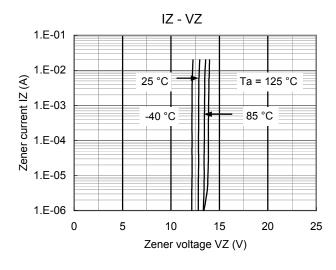
Zener Diode

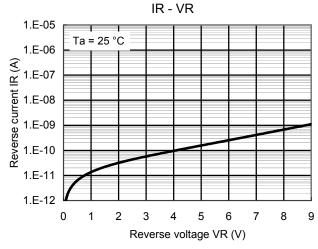
DZ2413000L

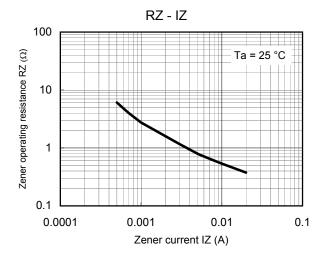
## Technical Data (reference)

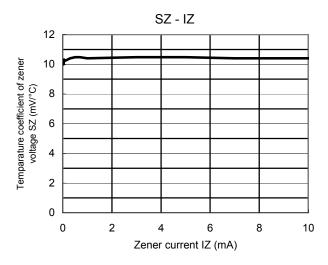








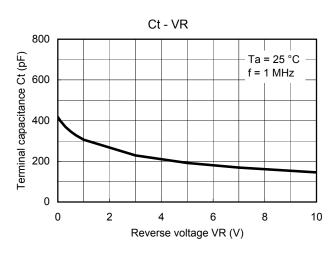


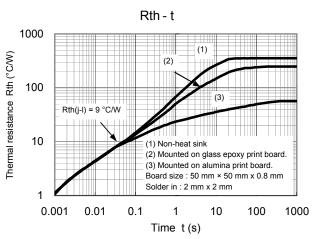


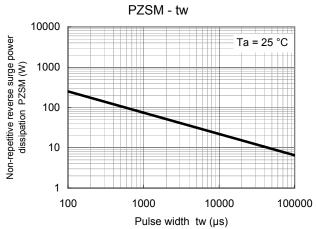
Established: 2011-09-09 Revised: 2013-05-08 **Panasonic** 

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## Technical Data (reference)







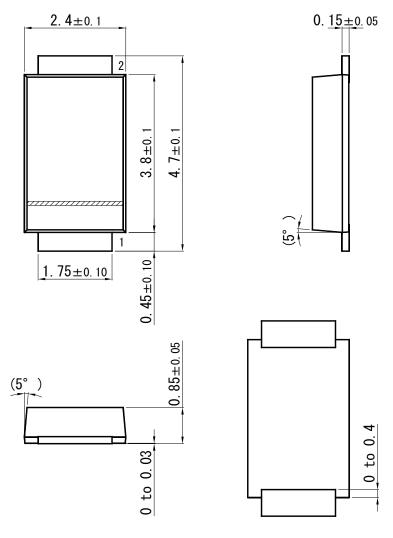
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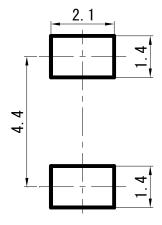
TMiniP2-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)

Established: 2011-09-09 Revised: 2013-05-08



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