Zener Diode

#### DZ2W47000L

# **Panasonic**

### DZ2W47000L

### Silicon epitaxial planar type

For constant voltage / For surge absorption circuit DZ24470 in Mini2 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: PG

#### ■ 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	200	mA
Total power dissipation *1	PT	1	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

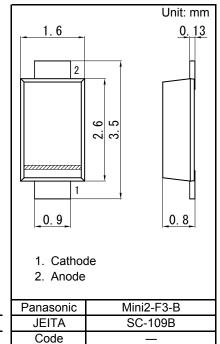
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	VF	IF = 200 mA			1.2	V
Zener voltage *1, *2	VZ	IZ = 5 mA	44.65	47.00	49.35	V
Zener operating resistance	RZ	IZ = 5 mA			65	Ω
Reverse current	IR	VR = 37.6 V			10	μA
Temperature coefficient of zener voltage *3	SZ	IZ = 5 mA		55.0		mV/°C

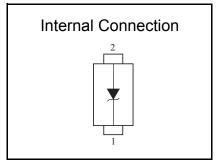
- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.
  - 2. Absolute frequency of input and output is 5 MHz.
  - \*1 The temperature must be controlled 25°C for VZ mesurement.
     VZ value measured at other temperature must be adjusted to VZ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

: 2013-05-08

Established: 2011-01-28

Revised

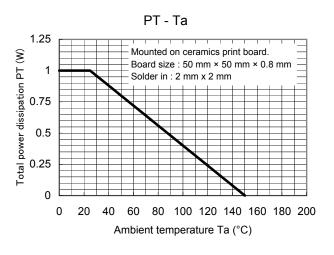


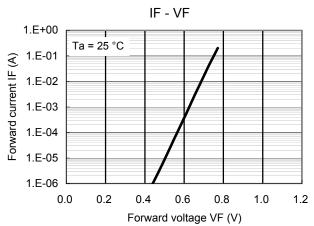


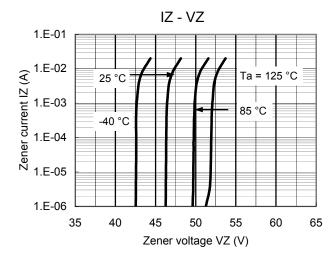
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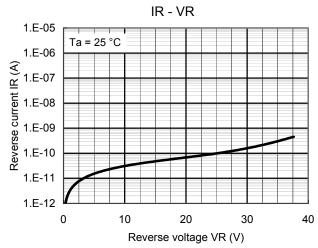
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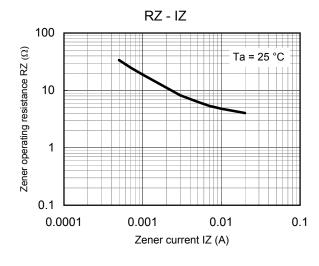
## Technical Data (reference)

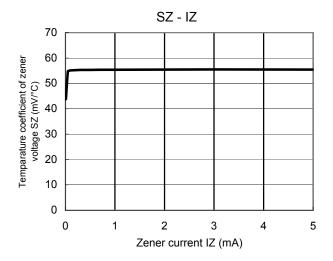










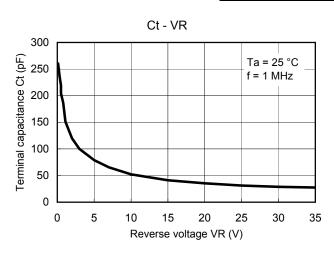


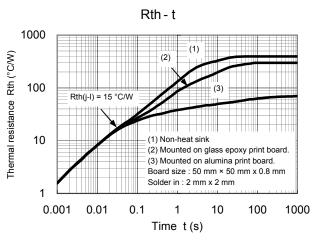
Established: 2011-01-28 Revised: 2013-05-08 **Panasonic** 

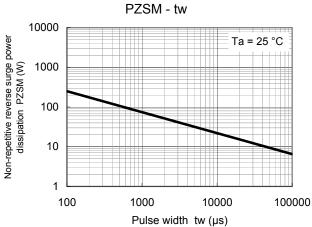
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## Technical Data (reference)







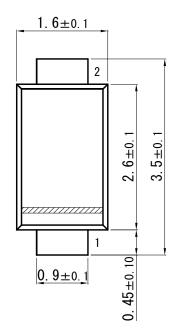
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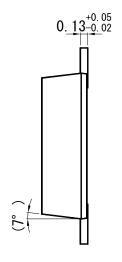
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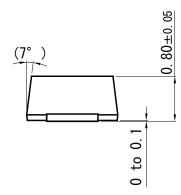
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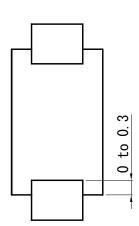
Mini2-F3-B

Unit: mm

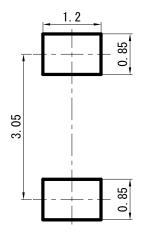








■ Land Pattern (Reference) (Unit: mm)



Established: 2011-01-28 Revised: 2013-05-08

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