

## DZ2451000L

### Silicon epitaxial planar type

For constant voltage / For surge absorption circuit

Capability of withstanding a high surge type

DZ2W510 in Power type package

#### ■ Features

- Excellent rising characteristics of zener current  $I_Z$
- Low zener operating resistance  $R_Z$
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

#### ■ Marking Symbol: RG

#### ■ Packaging

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

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

Parameter	Symbol	Rating	Unit
Repetitive peak forward current	IFRM	500	mA
Forward current	IF	400	mA
Total power dissipation <sup>*1</sup>	PT	2	W
Non-repetitive reverse power surge <sup>*2</sup>	PZSM	100	W
Electrostatic discharge <sup>*3</sup>	ESD	±30	kV
Junction temperature	T <sub>j</sub>	150	°C
Operating ambient temperature	T <sub>opr</sub>	-40 to +85	°C
Storage temperature	T <sub>stg</sub>	-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  $t = 0.1\text{ms}$

\*3 Test method: IEC61000\_4\_2(C = 150 pF, R = 330 Ω, Contact discharge: 10 times)

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	VF	IF = 200 mA			1.2	V
Zener voltage <sup>*1, *2</sup>	VZ	IZ = 5 mA	48.45	51.00	53.55	V
Zener operating resistance	RZ	IZ = 5 mA			65	Ω
Reverse current	IR	VR = 40.8 V			10	μA
Temperature coefficient of zener voltage <sup>*3</sup>	SZ	IZ = 5 mA		58.0		mV/°C

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.

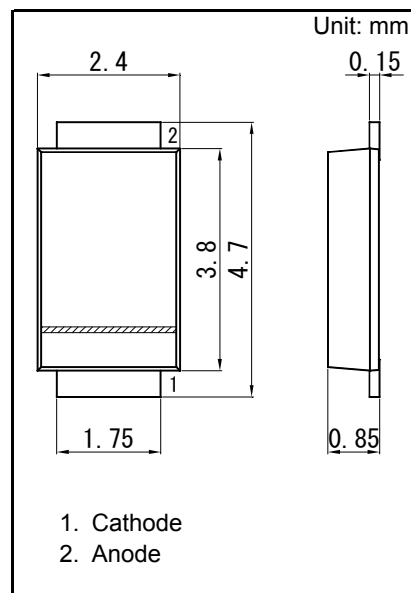
2. Absolute frequency of input and output is 5 MHz.

3. \*1 The temperature must be controlled 25°C for VZ measurement.

VZ value measured at other temperature must be adjusted to VZ (25°C)

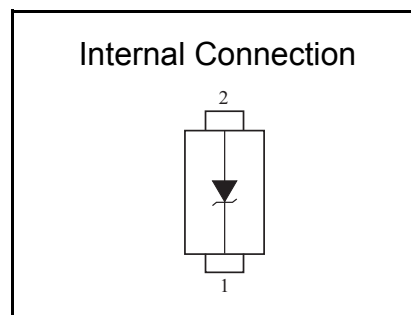
\*2 VZ guaranteed 20 ms after current flow.

\*3 T<sub>j</sub> = 25°C to 150°C

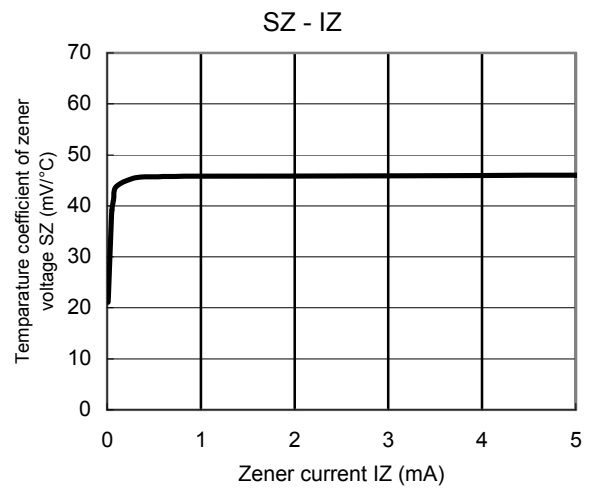
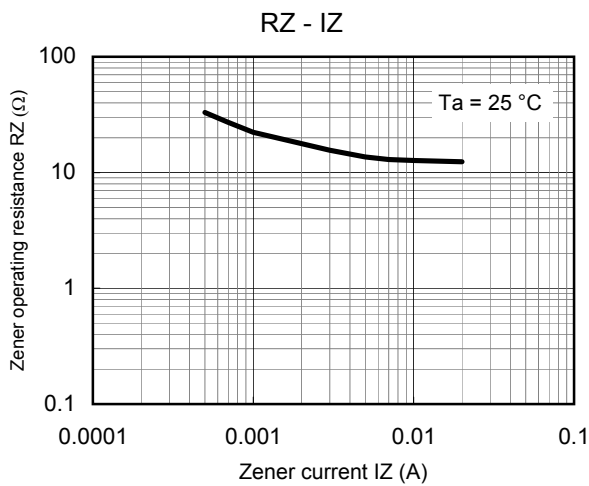
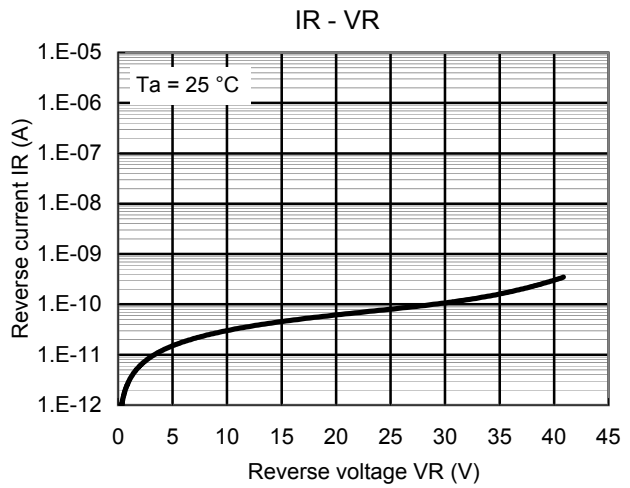
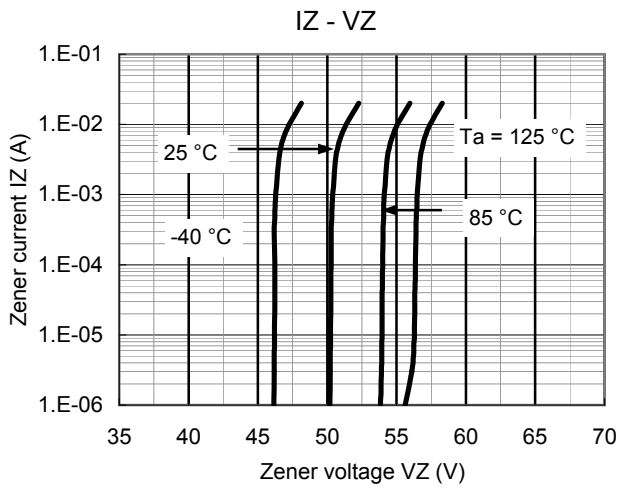
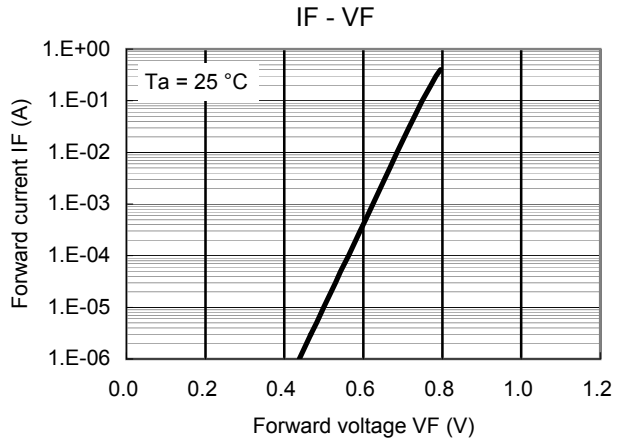
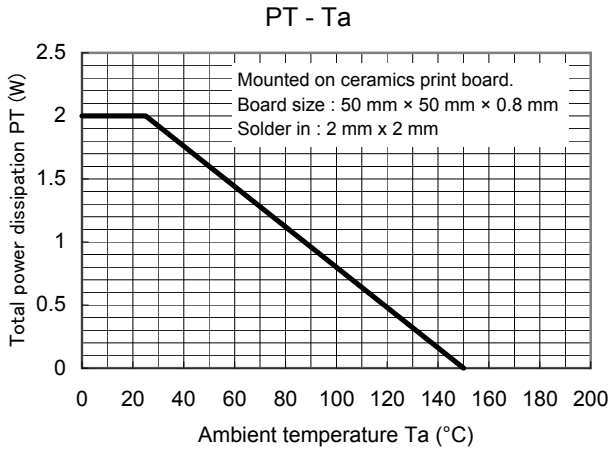


1. Cathode  
2. Anode

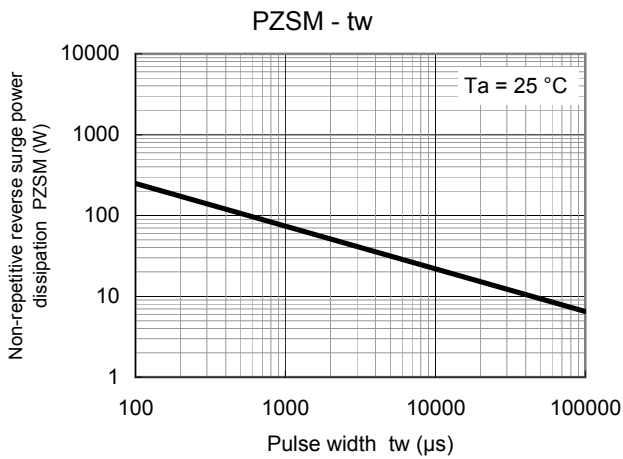
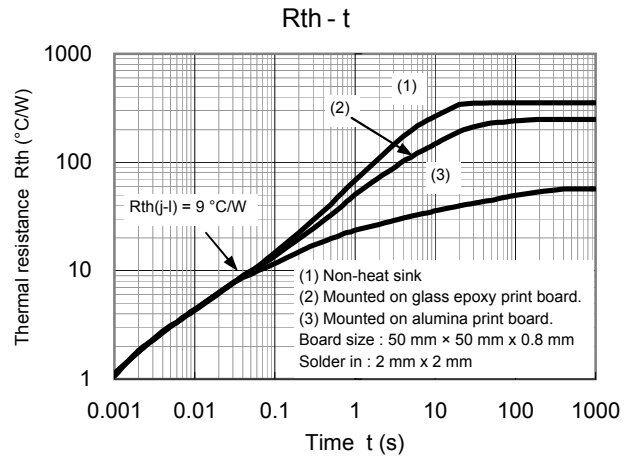
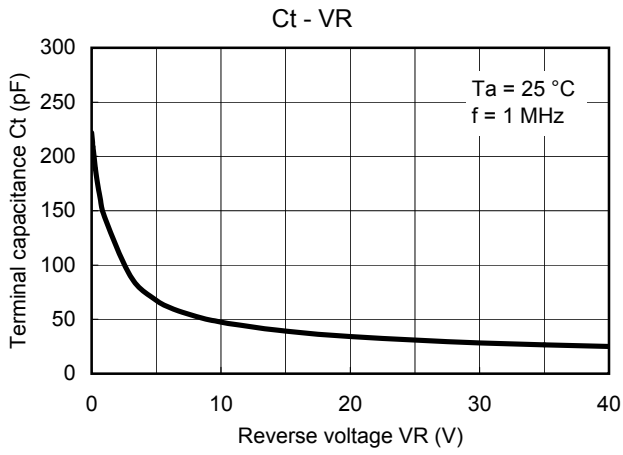
Panasonic	TMiniP2-F2-B
JEITA	SC-110A
Code	—



Technical Data ( reference )

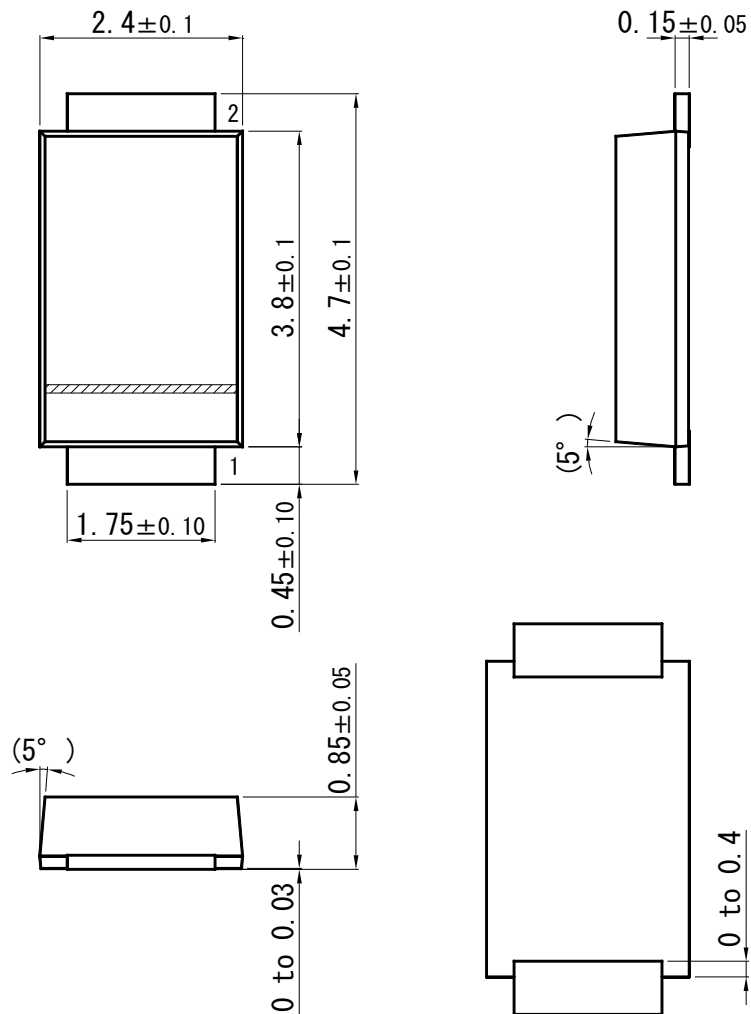


Technical Data ( reference )

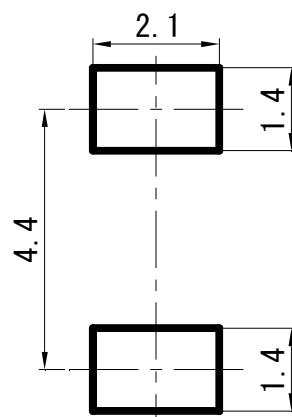


TMiniP2-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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