



# DZ2W12000L

Silicon epitaxial planar type

For constant voltage / For surge absorption circuit  
 DZ24120 in Mini2 type package

■ Features

- Excellent rising characteristics of zener current I<sub>Z</sub>
- Low zener operating resistance R<sub>Z</sub>
- Halogen-free / RoHS compliant  
 (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Marking Symbol: RJ

■ 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 <sup>*1</sup>	PT	1	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: <sup>\*1</sup> Mounted on ceramics print circuit board.

Board size: 50 mm × 50 mm

Board thickness: 0.8 mm

Soldering size: 2 mm × 2 mm

<sup>\*2</sup> t = 0.1ms

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

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 200 mA			1.2	V
Zener voltage <sup>*1, *2</sup>	V <sub>Z</sub>	I <sub>Z</sub> = 10 mA	11.40	12.00	12.60	V
Zener operating resistance	R <sub>Z</sub>	I <sub>Z</sub> = 10 mA			30	Ω
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 8.0 V			10	μA
Temperature coefficient of zener voltage <sup>*3</sup>	SZ	I <sub>Z</sub> = 10 mA		8.8		mV/°C

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

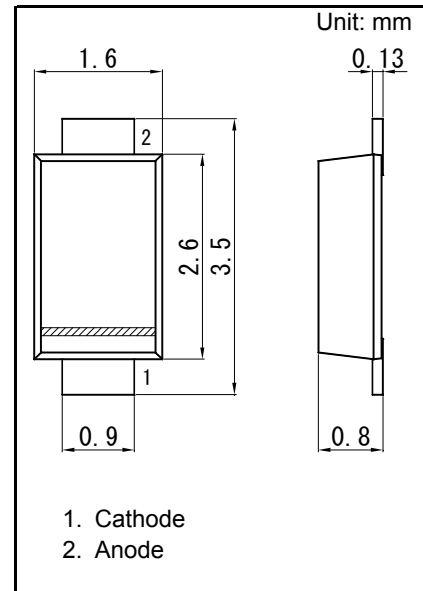
2. Absolute frequency of input and output is 5 MHz.

3. <sup>\*1</sup> The temperature must be controlled 25°C for V<sub>Z</sub> measurement.

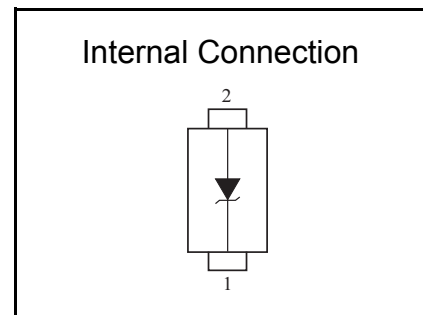
V<sub>Z</sub> value measured at other temperature must be adjusted to V<sub>Z</sub> (25°C)

<sup>\*2</sup> V<sub>Z</sub> guaranteed 20 ms after current flow.

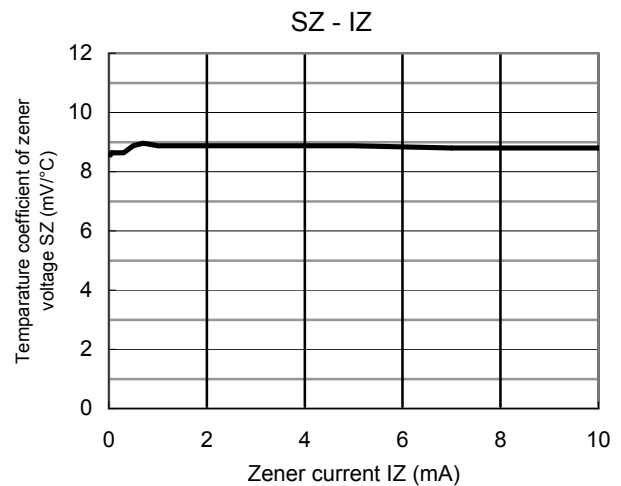
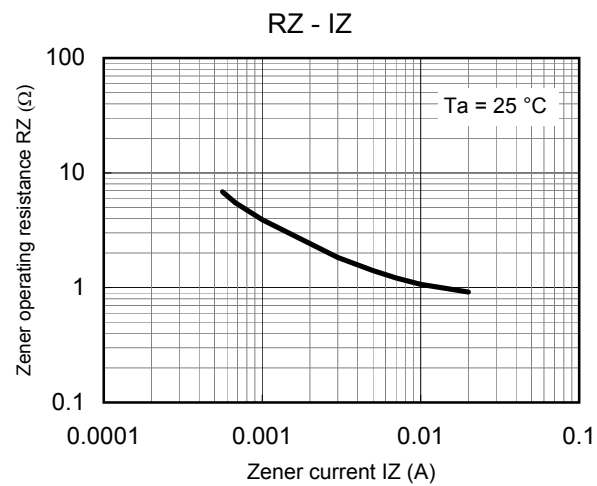
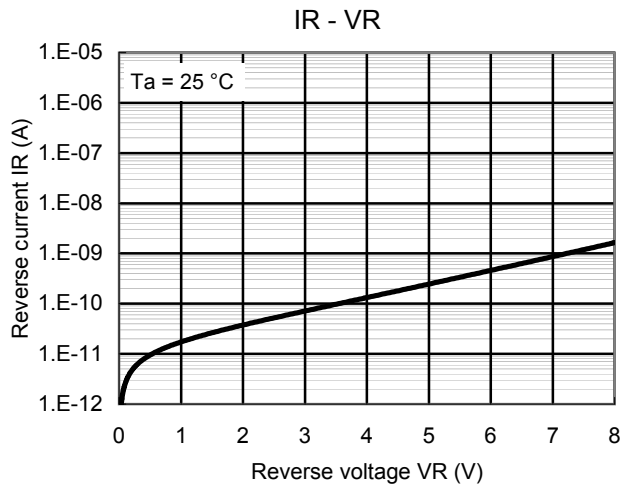
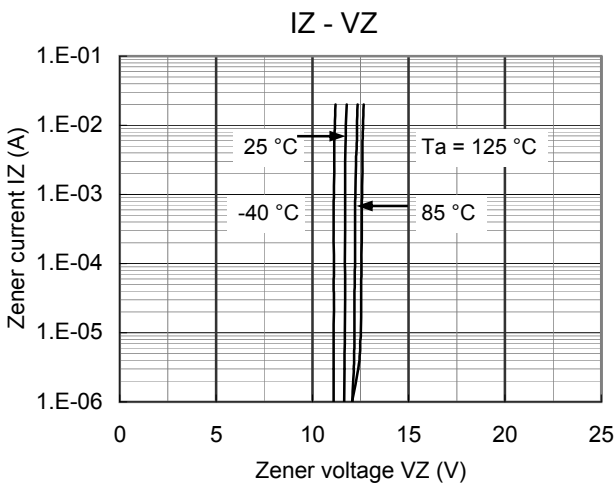
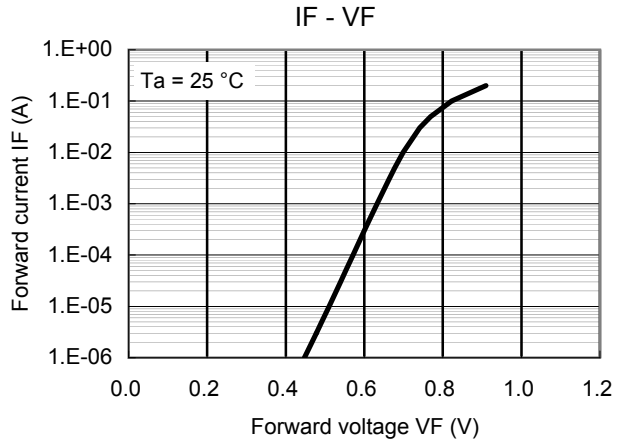
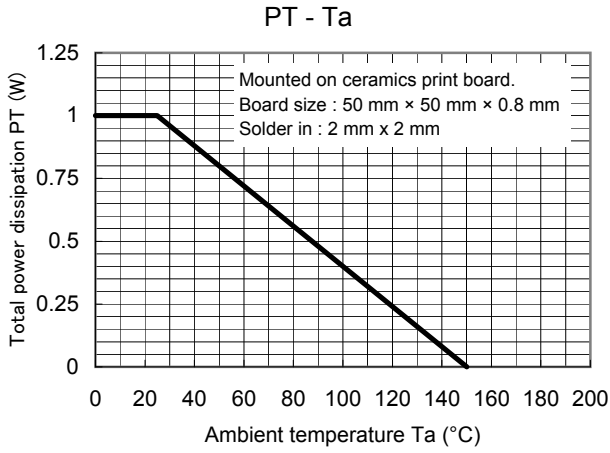
<sup>\*3</sup> T<sub>j</sub> = 25°C to 150°C



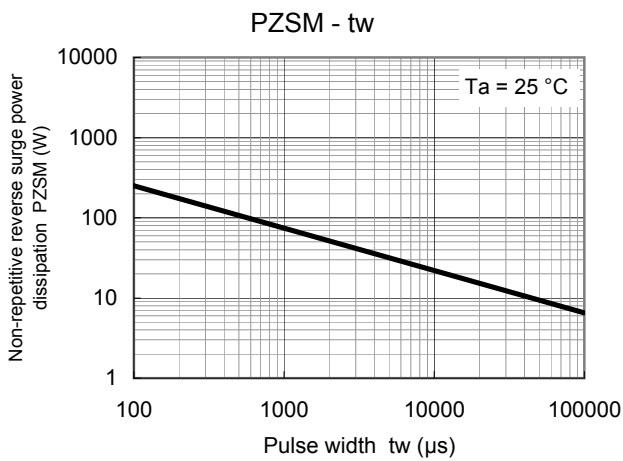
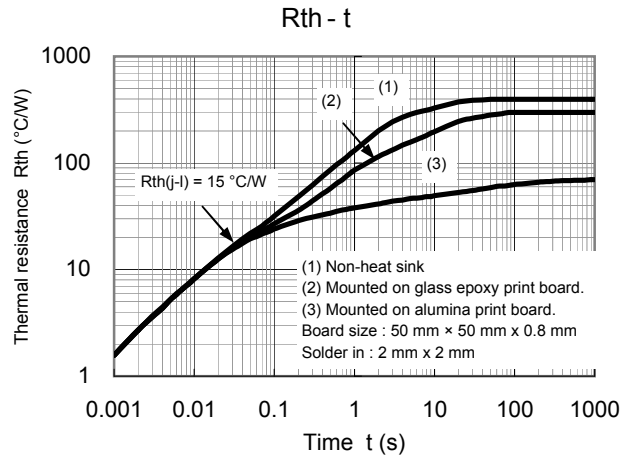
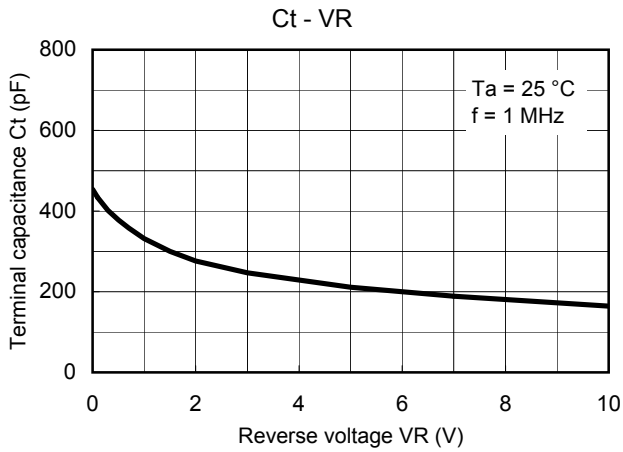
Panasonic	Mini2-F3-B
JEITA	SC-109B
Code	—



Technical Data ( reference )



Technical Data ( reference )



Mini2-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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