

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 ^{*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} $t = 0.1\text{ms}$

^{*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 ^{*1, *2}	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 ^{*3}	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.

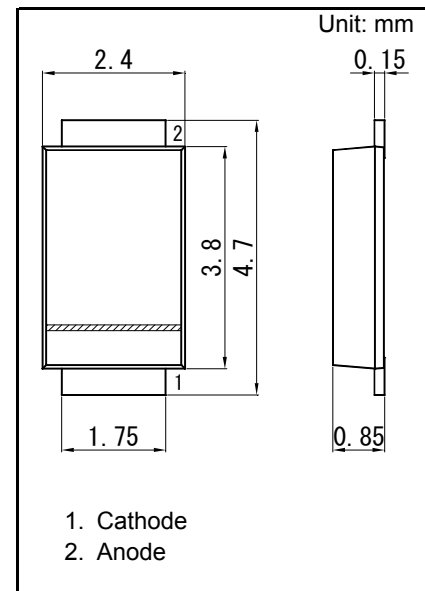
2. Absolute frequency of input and output is 5 MHz.

3. ^{*1} The temperature must be controlled 25°C for VZ measurement.

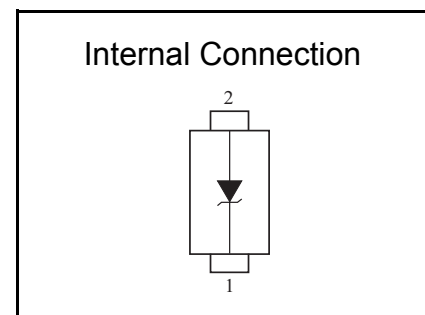
VZ value measured at other temperature must be adjusted to VZ (25°C)

^{*2} VZ guaranteed 20 ms after current flow.

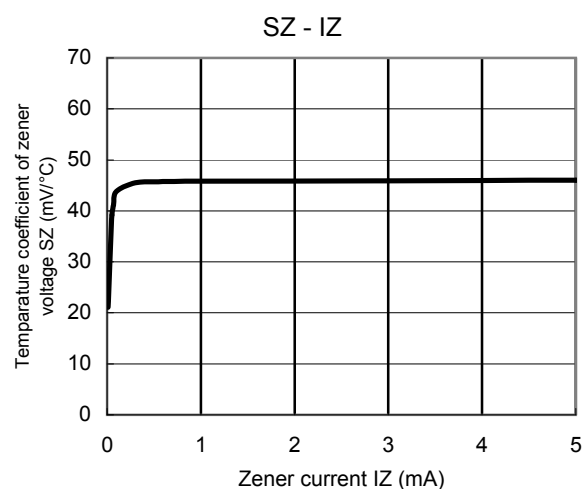
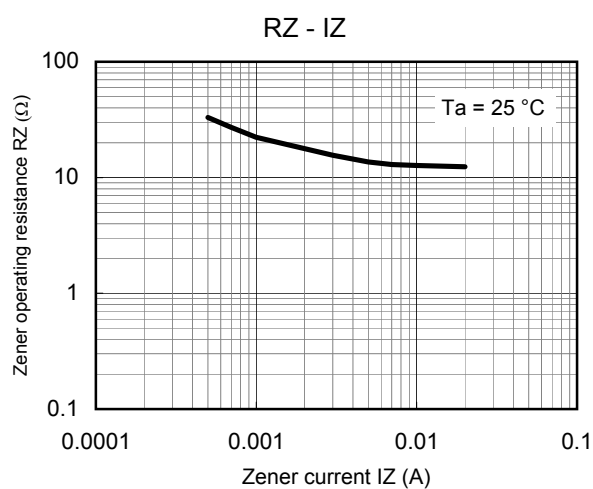
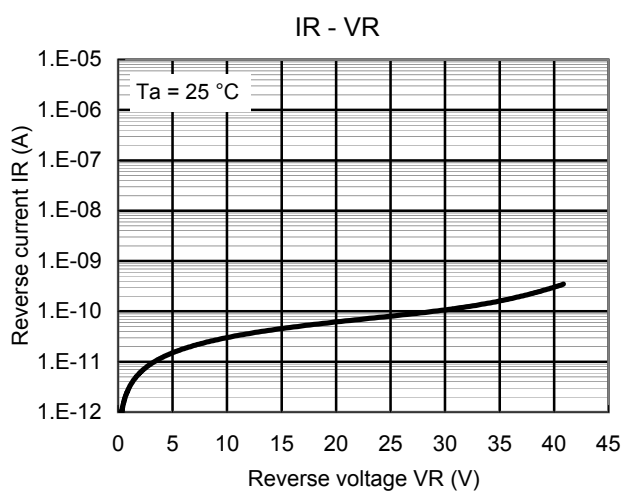
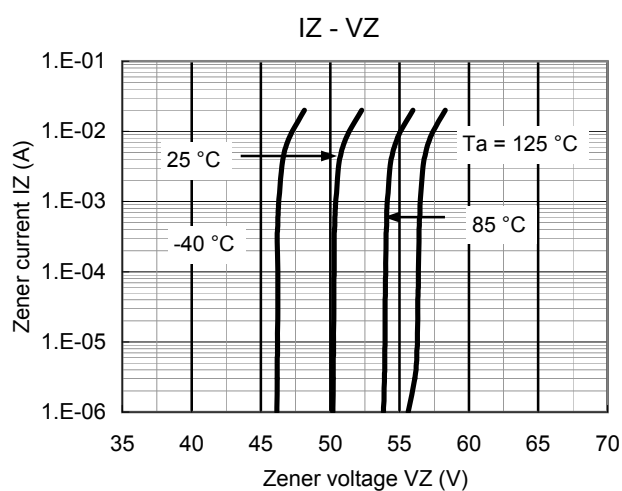
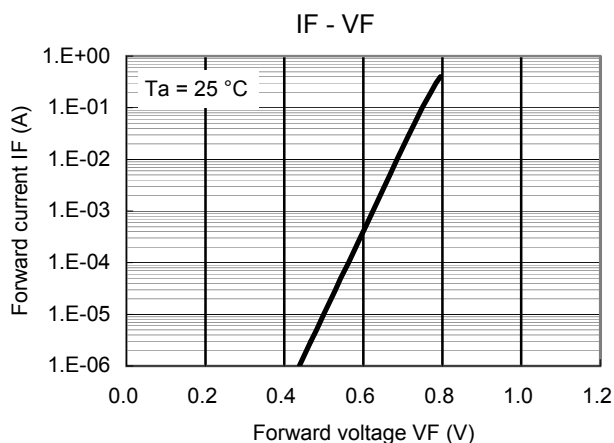
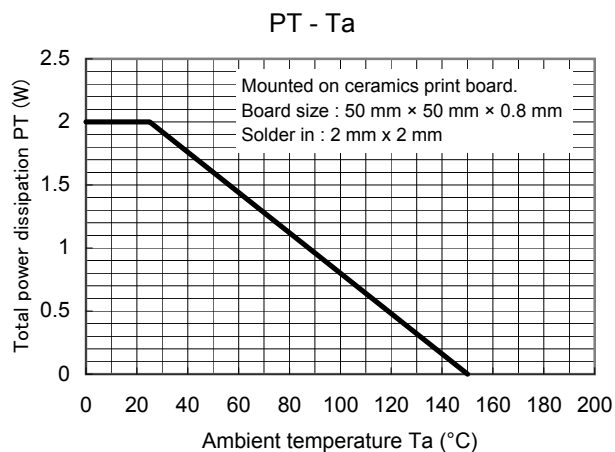
^{*3} Tj = 25°C to 150°C



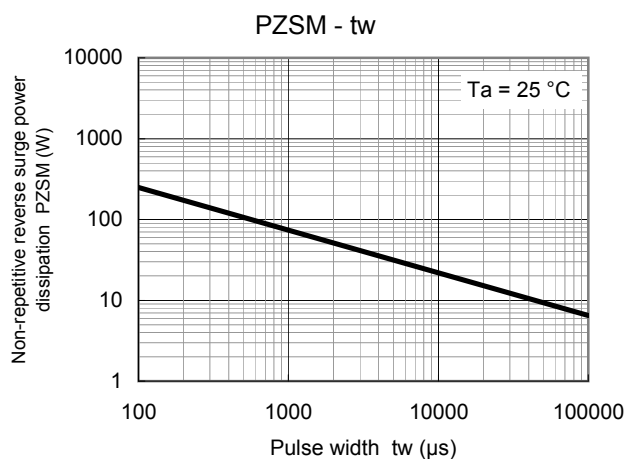
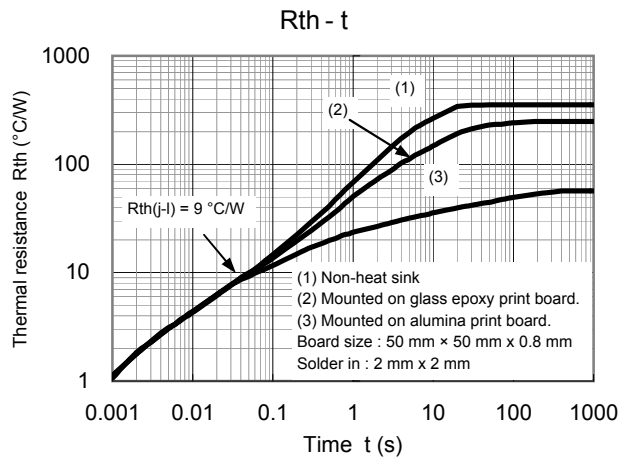
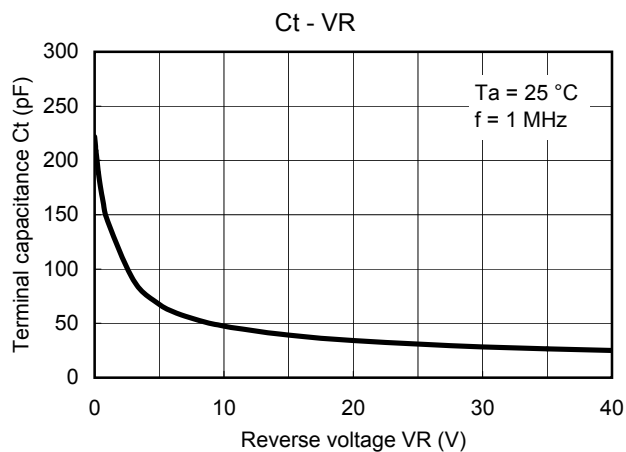
Panasonic	TMiniP2-F2-B
JEITA	SC-110A
Code	—



Technical Data (reference)

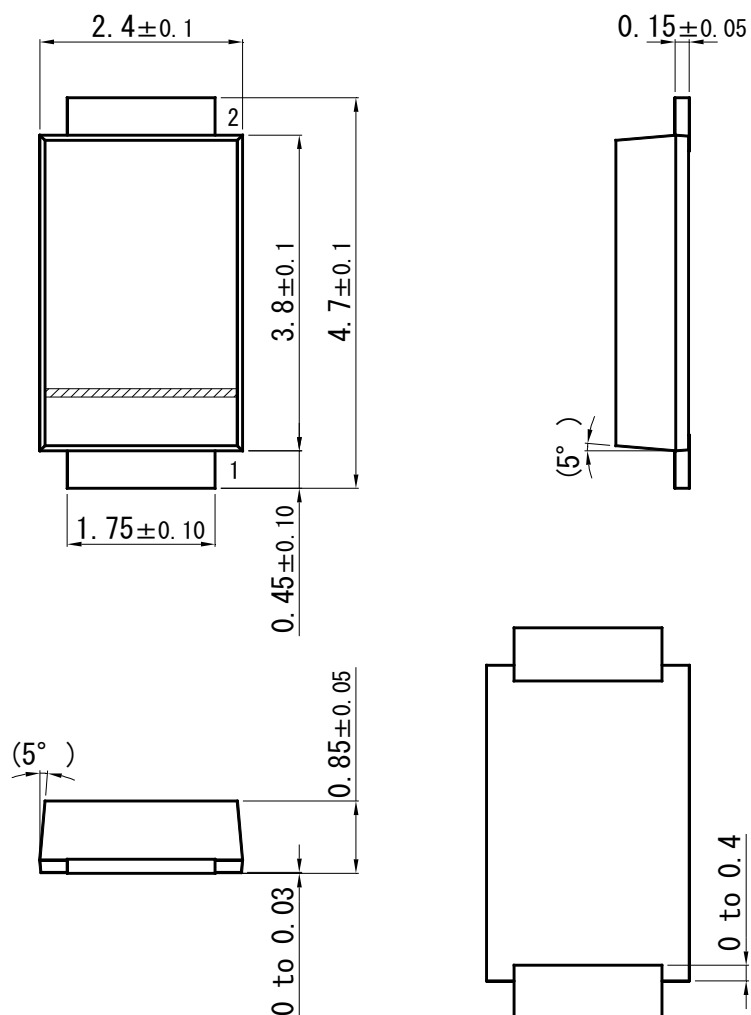


Technical Data (reference)

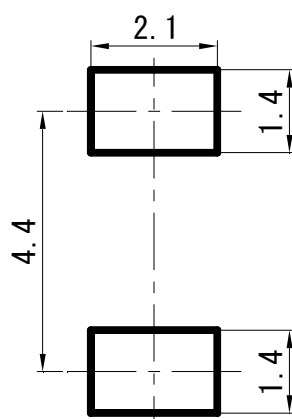


TMiniP2-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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