

Panasonic

Zener Diode
DZ2W03000L

DZ2W03000L

Silicon epitaxial planar type

For constant voltage / For surge absorption circuit
DZ24030 in Mini2 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: 3J

■ Packaging

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

■ Absolute Maximum Ratings $T_a = 25^\circ C$

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	T _j	150	°C
Operating ambient temperature	T _{opr}	-40 to +85	°C
Storage temperature	T _{stg}	-55 to +150	°C

Note: *1 Mounted on ceramics print circuit board.

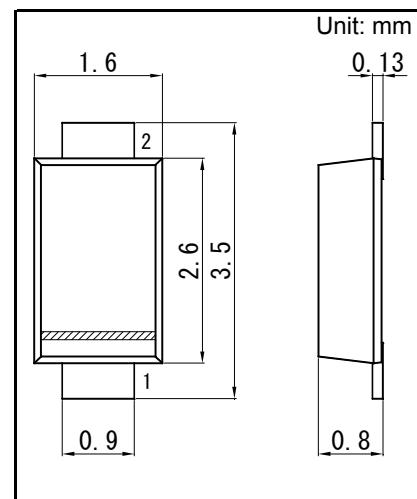
Board size: 50 mm × 50 mm

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)



1. Cathode
2. Anode

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

Internal Connection



■ Electrical Characteristics $T_a = 25^\circ C \pm 3^\circ C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	VF	IF = 200 mA			1.2	V
Zener voltage ^{*1, *2}	VZ	IZ = 20 mA	2.85	3.00	3.15	V
Zener operating resistance	RZ	IZ = 20 mA			120	Ω
Reverse current	IR	VR = 1 V			150	μA
Temperature coefficient of zener voltage ^{*3}	SZ	IZ = 20 mA		-1.7		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.

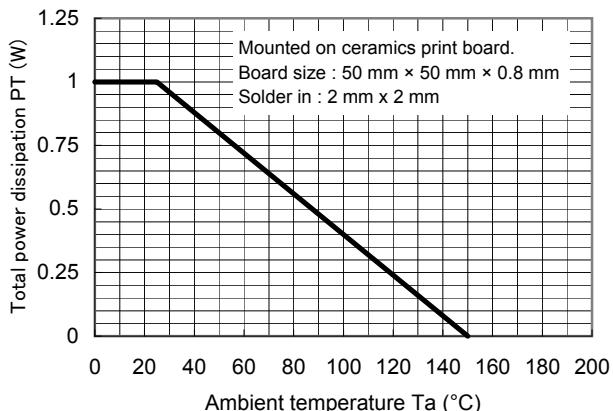
VZ value measured at other temperature must be adjusted to VZ (25°C)

*2 VZ guaranteed 20 ms after current flow.

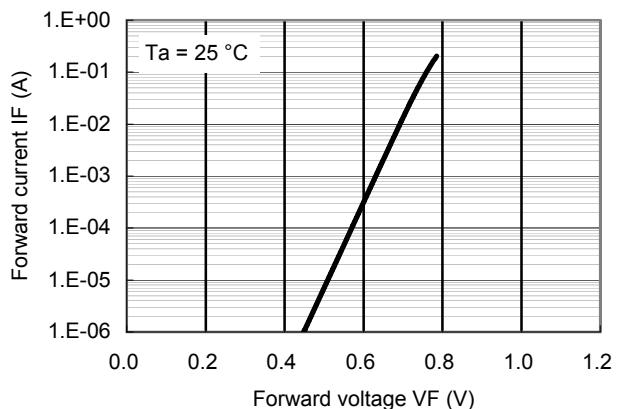
*3 T_j = 25°C to 150°C

Technical Data (reference)

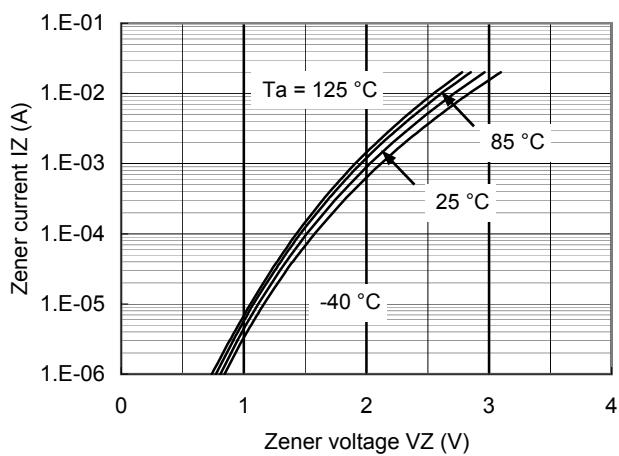
PT - Ta



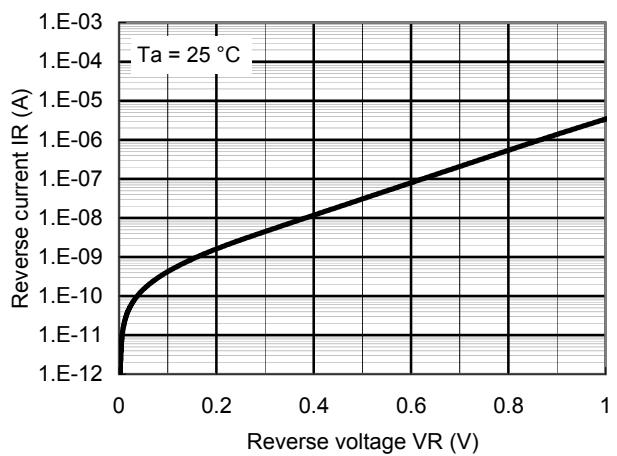
IF - VF



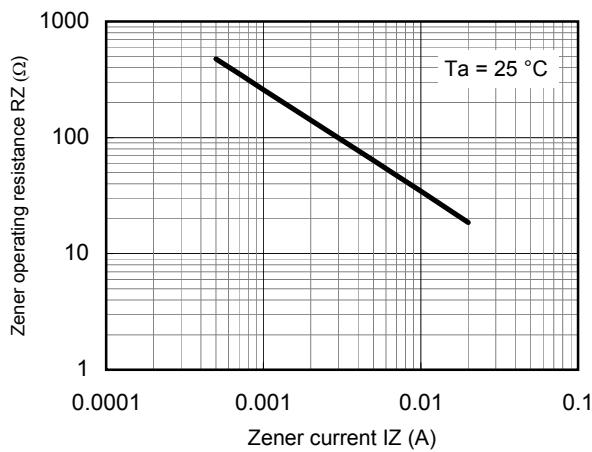
IZ - VZ



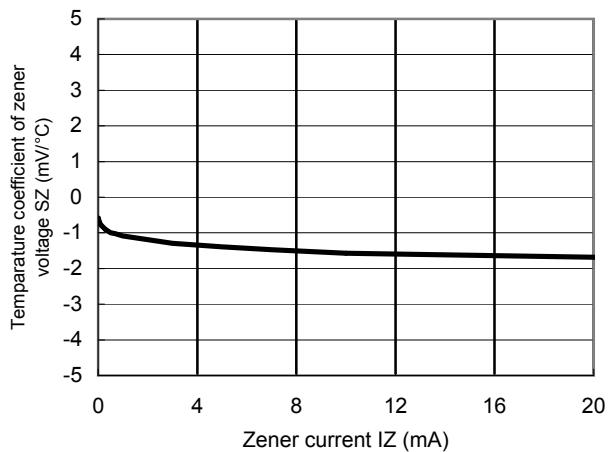
IR - VR



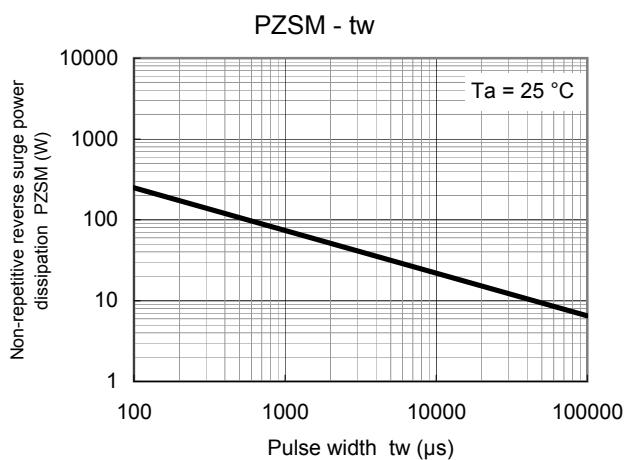
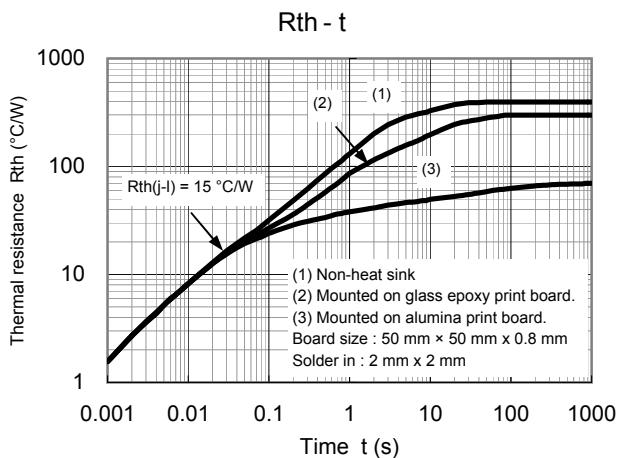
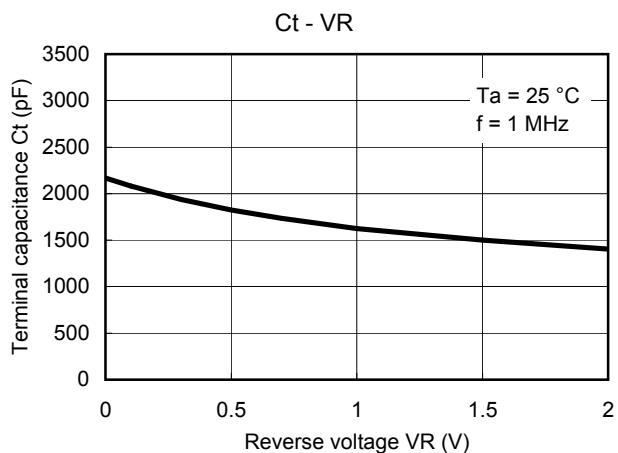
RZ - IZ



SZ - IZ



Technical Data (reference)

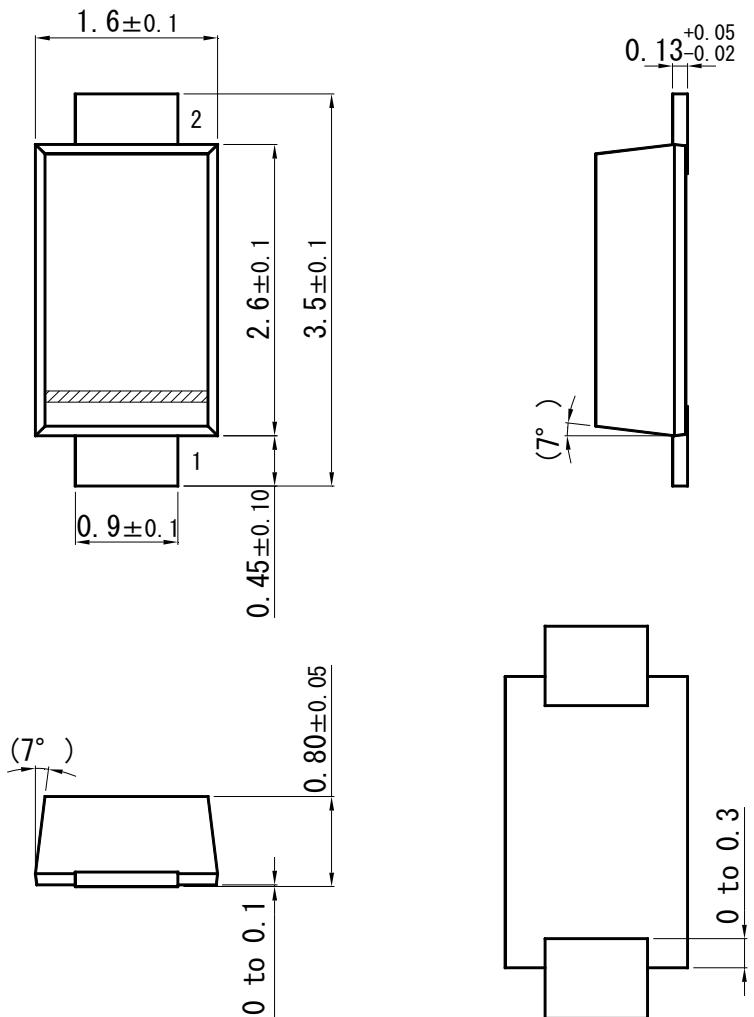


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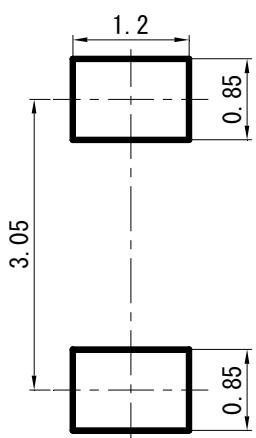
Zener Diode
DZ2W03000L

Mini2-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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