Zener Diode

Panasonic DZ2W02400L

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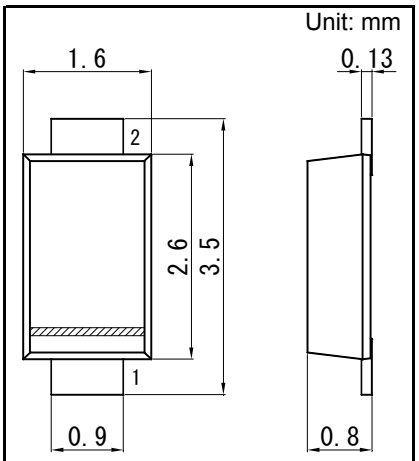
Silicon epitaxial planar type

For constant voltage / For surge absorption circuit
DZ24024 in Mini2 type package



1. Cathode
2. Anode

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

■ 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: 1J

■ Packaging

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

Internal Connection

■ 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 Ω, Contact discharge:10 times)

■ Electrical Characteristics Ta = 25 °C ± 3 °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	2.28	2.40	2.52	V
Zener operating resistance	RZ	IZ = 20 mA			150	Ω
Reverse current	IR	VR = 1 V			200	μA
Temperature coefficient of zener voltage *3	SZ	IZ = 20 mA		-1.4		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 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

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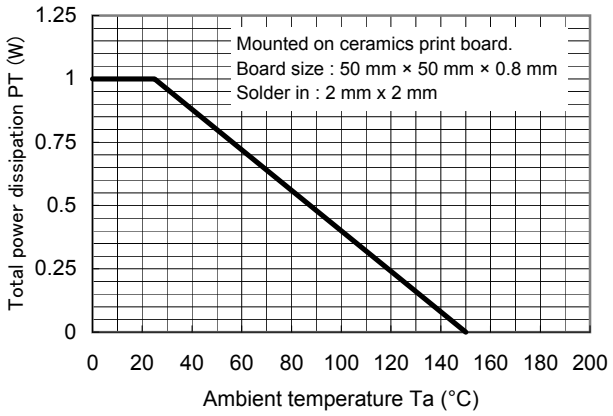
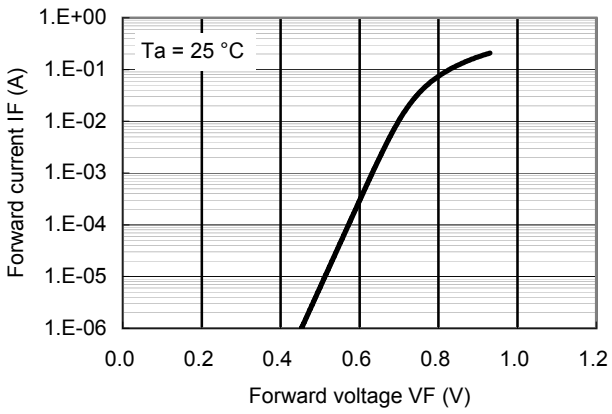
Technical Data (reference)

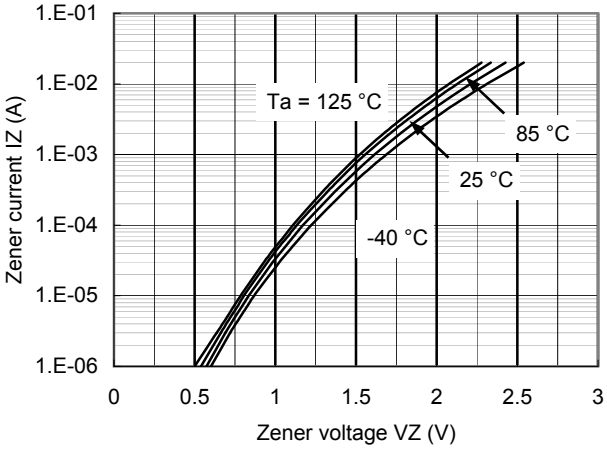
PT - Ta



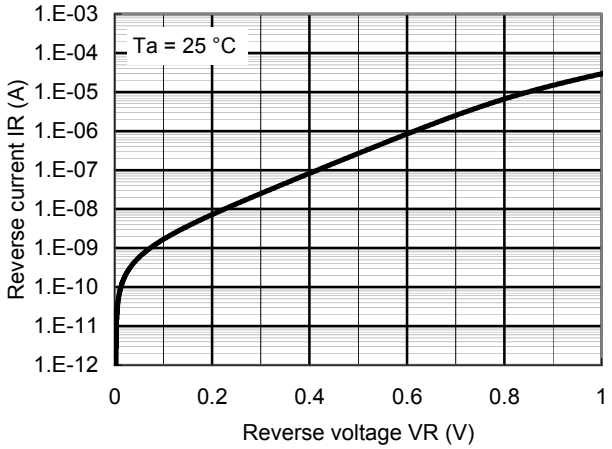
IF - VF



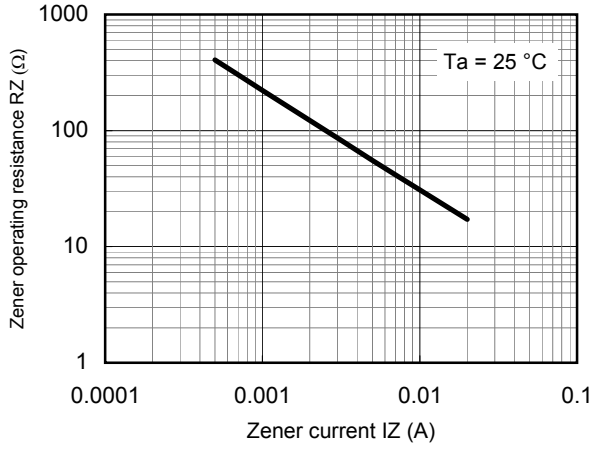
IZ - VZ



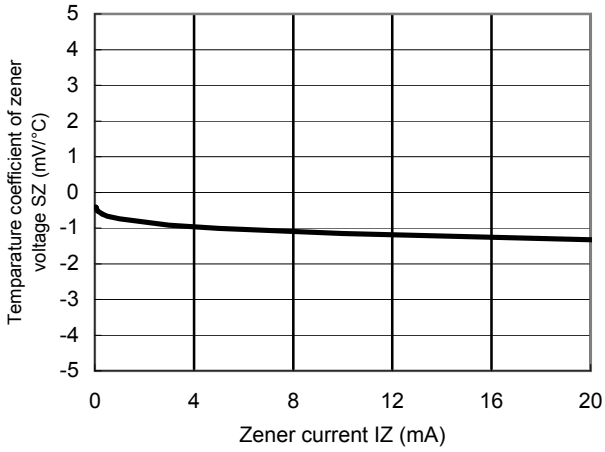
IR - VR



RZ - IZ



SZ - IZ



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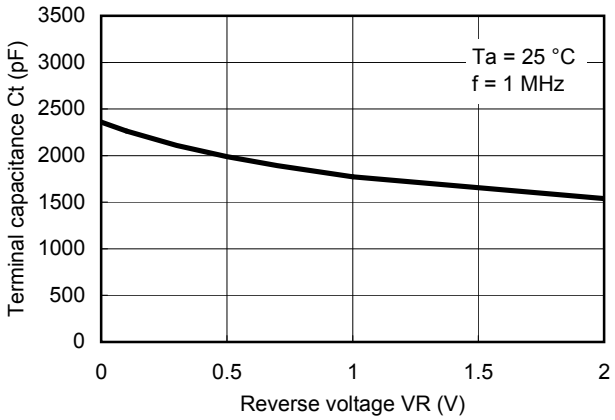
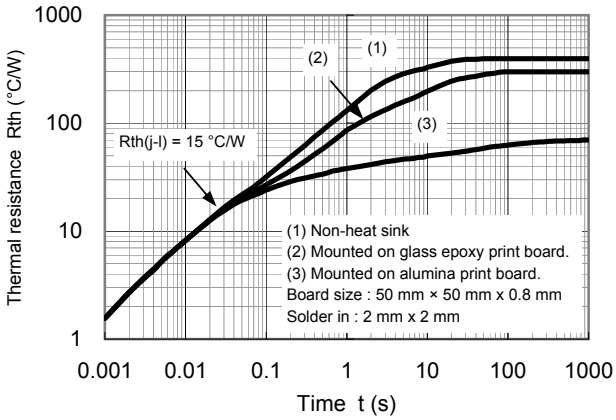
Technical Data (reference)

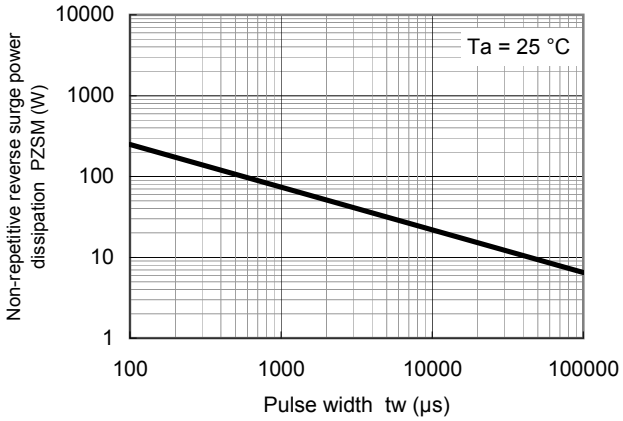
Ct - VR



Rth - t



PZSM - tw



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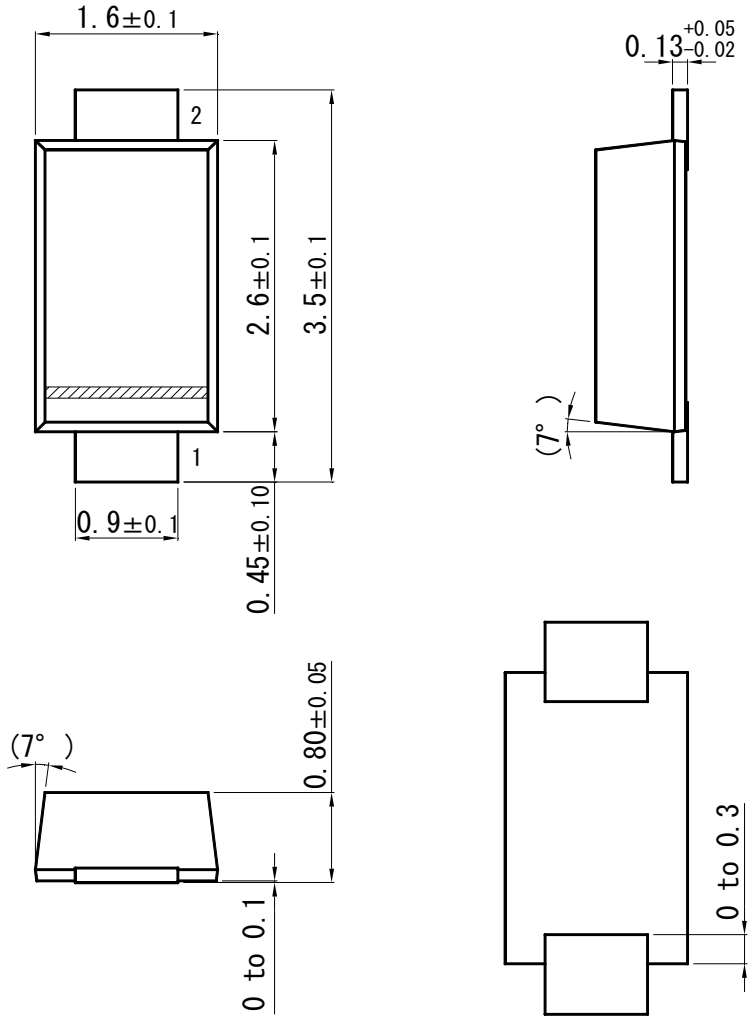
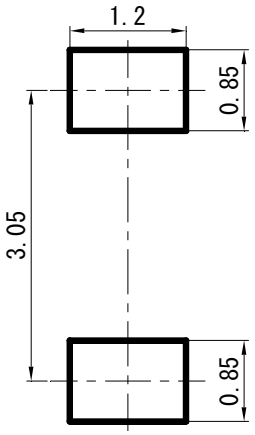
Mini2-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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