

Zener Diode DZ2W02400L

DZ2W02400L Silicon epitaxial planar type

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

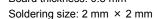
Features

- · 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

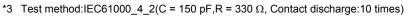
Packaging

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

■ 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							



*2 t = 0.1ms



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

Parameter	Symbol	Conditions	Min	Тур	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.

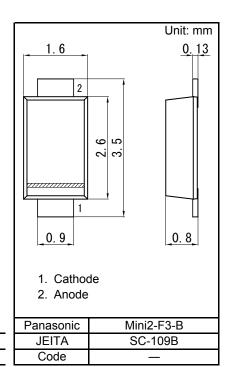
2. Absolute frequency of input and output is 5 MHz.

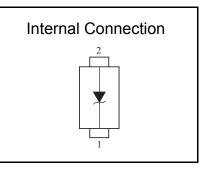
3. *1 The temperature must be controlled 25°C for VZ mesurement.

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

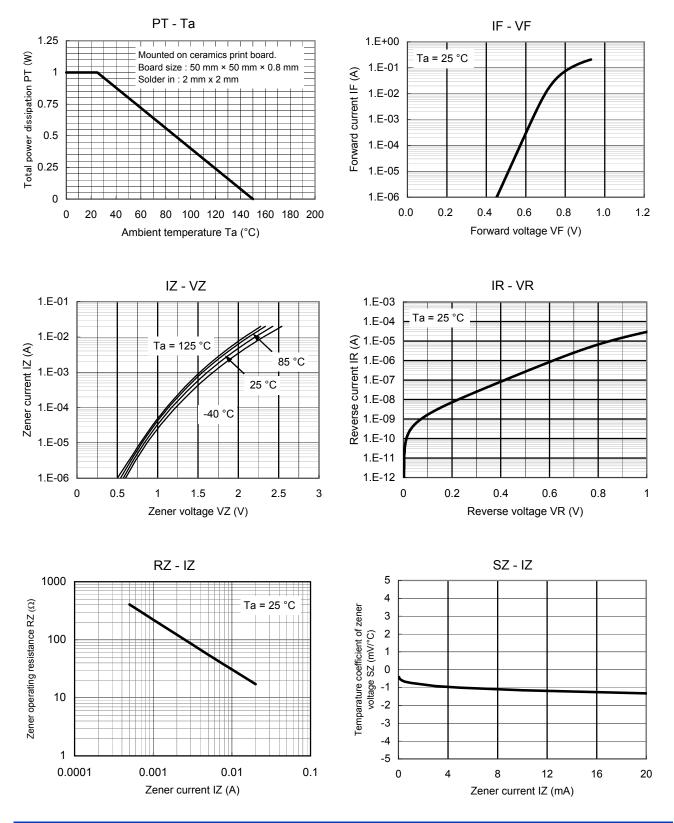






Zener Diode DZ2W02400L

Technical Data (reference)





3500

3000

2500

2000 1500

1000 500

> 0 L 0

10000

1000

100

10

1 └ 100

1000

Pulse width tw (µs)

10000

100000

Non-repetitive reverse surge power dissipation PZSM (W)

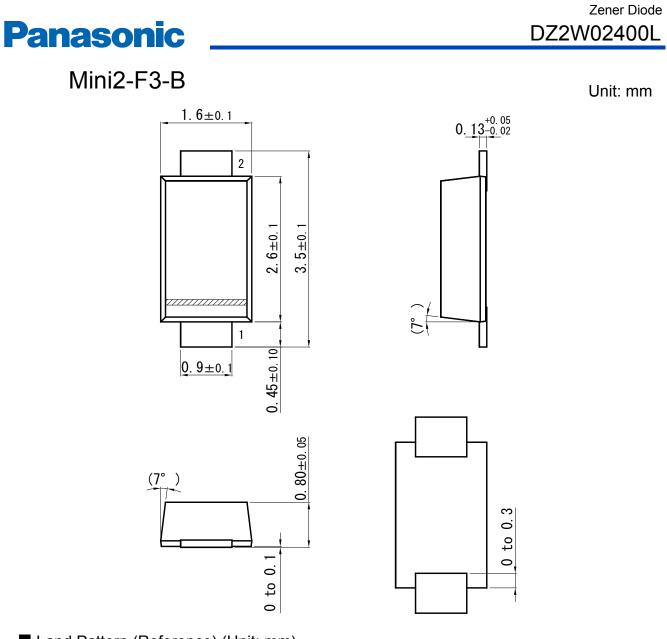
Terminal capacitance Ct (pF)

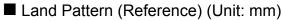
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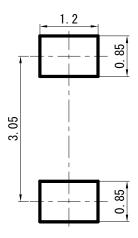
Rth - t Ct - VR 1000 (1) Ta = 25 °C Thermal resistance Rth (°C/W) (2) f = 1 MHz 100 (3) Rth(j-l) = 15 °C/W 10 (1) Non-heat sink (1) Nothera sink(2) Mounted on glass epoxy print board.(3) Mounted on alumina print board. Board size : 50 mm × 50 mm x 0.8 mm Solder in : 2 mm x 2 mm 1 0.5 1.5 2 0.001 0.01 0.1 1 10 100 1000 1 Reverse voltage VR (V) Time t (s) PZSM - tw Ta = 25 °C

Technical Data (reference)

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