Zener Diode

DZ2451000L

Panasonic

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 Iz
- · Low zener operating resistance Rz
- 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 Ta = 25 °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 = 0.1ms
- *3 Test method:IEC61000_4_2(C = 150 pF,R = 330 Ω , Contact discharge:10 times)

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

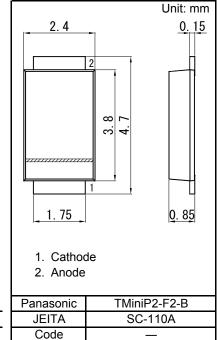
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	VF	IF = 200 mA			1.2	V
Zener voltage *1,*2	VZ	IZ = 5 mA	48.45	51.00	53.55	V
Zener operating resistance	RZ	IZ = 5 mA			65	Ω
Reverse current	IR	VR = 40.8 V			10	μΑ
Temperature coefficient of zener voltage *3	SZ	IZ = 5 mA		58.0		mV/°C

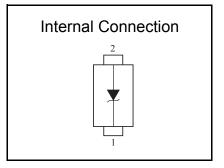
- Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.
 - 2. Absolute frequency of input and output is 5 MHz.
 - *1 The temperature must be controlled 25°C for VZ mesurement.
 VZ value measured at other temperature must be adjusted to VZ (25°C)
 - *2 VZ guaranted 20 ms after current flow.
 - *3 Tj = 25°C to 150°C

: 2013-05-13

Established: 2011-09-01

Revised

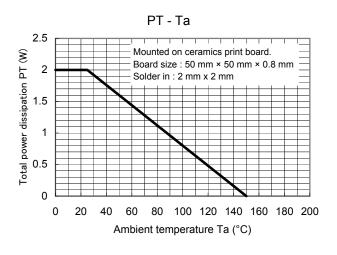


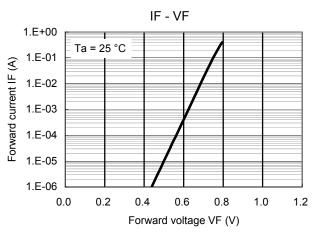


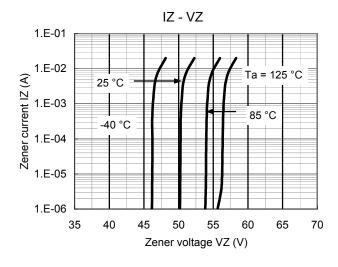
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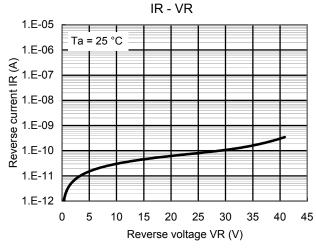
DZ2451000L

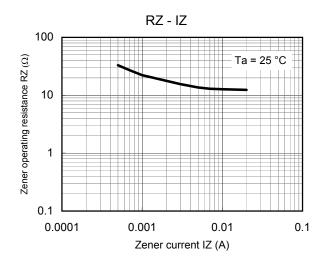
Technical Data (reference)

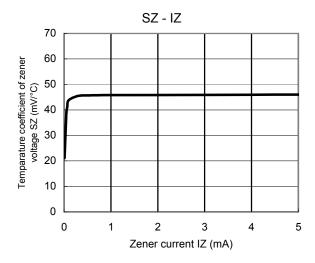










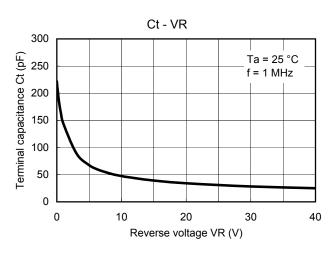


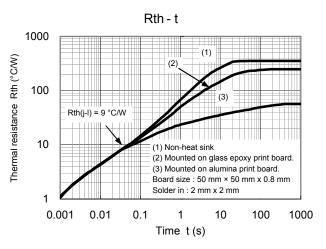
Established: 2011-09-01 Revised: 2013-05-13

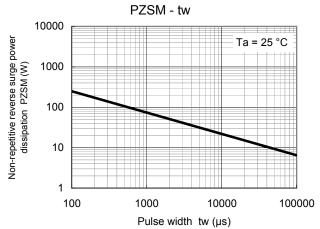
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Technical Data (reference)







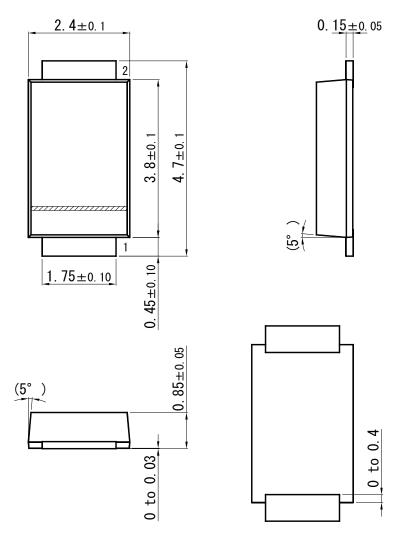
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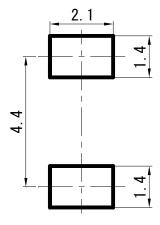
TMiniP2-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)

Established: 2011-09-01 Revised: 2013-05-13



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