Panasonic

Zener Diode DZ2S051×0L

DZ2S051×0L Silicon epitaxial planar type

For constant voltage / For surge absorption circuit DZ2J051 in SSMini2 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: CJ or CU

Packaging

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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	200	mA
Total power dissipation *1	PT	150	mW
Electrostatic discharge *2	ESD	±15	kV
Junction temperature	Tj	150	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-55 to +150	С°

Note) *1 Mounted on glass epoxy print board (45 mm × 45 mm × 1 mm) Solder in (0.8 mm × 0.6 mm)

*2 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 = 10 mA			1.0	V
Zener voltage *1, *2	VZ	IZ = 5 mA	4.85		5.36	V
Zener operating resistance	RZ	IZ = 5 mA			60	Ω
Zener rise operating resistance	RZK	IZ = 1 mA			500	Ω
Reverse current	IR	VR = 2 V			1.0	μA
Temperature coefficient of zener voltage *3	SZ	IZ = 5 mA		0.7		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.

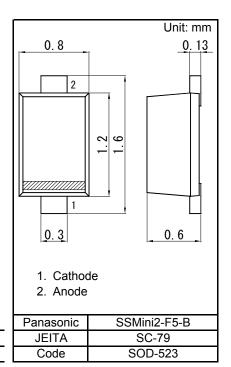
3. *1 The temperature must be controlled 25 °C for VZ mesurement.

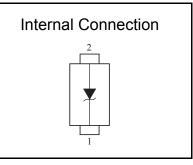
VZ value measured at other temperature must be adjusted to VZ (25 °C).

*2 VZ guaranted 20 ms after current flow Rank classification

*3 Tj = 25 °C to 150 °C

k classification						
Code		Μ			0	
Rank	М			No-rank		
VZ	5.00	to	5.26	4.85	to	5.36
Marking symbol		CU			CJ	

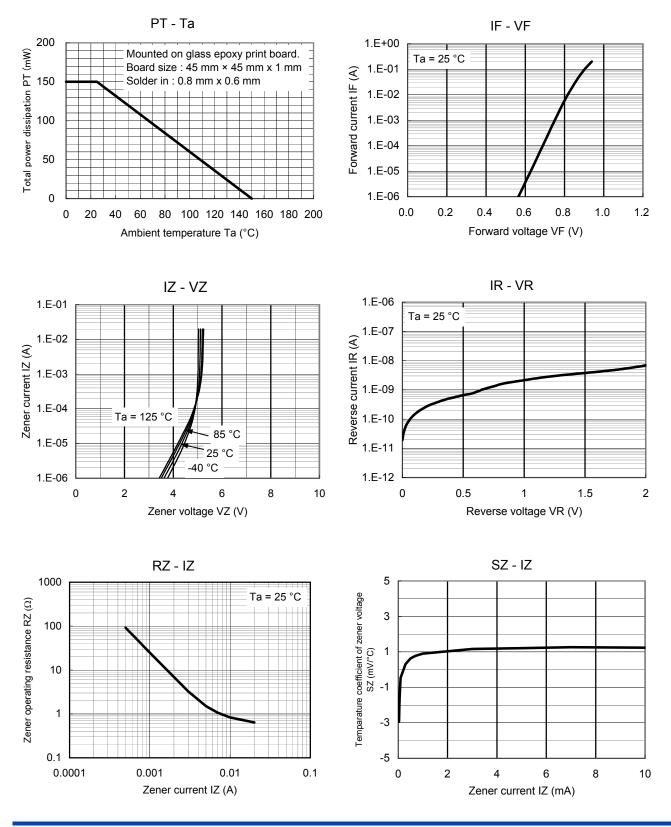






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Technical Data (reference)





1

80

70

60

50 40 30

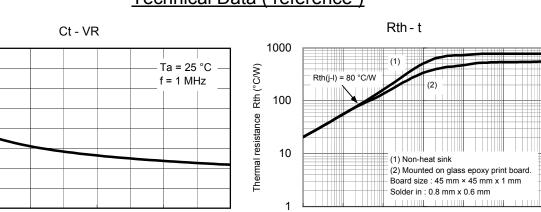
20

10

0 L 0

Terminal capacitance Ct (pF)

Zener Diode $DZ2S051 \times 0L$



0.001

0.01

0.1

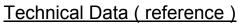
1

Time t (s)

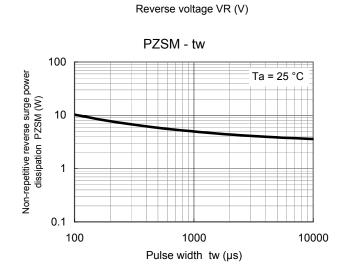
10

100

1000

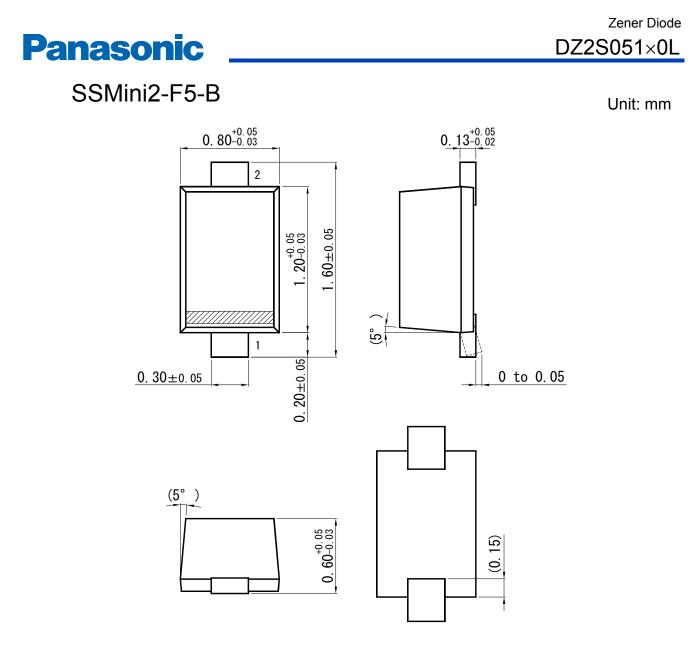


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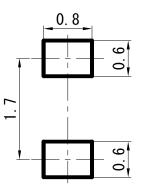


2

3



■ Land Pattern (Reference) (Unit: mm)



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