

Zener Diode

Unit: mm

0.13

DZ37120D0L Silicon epitaxial planar type

For surge absorption circuit DZ3S120D in SSSMini3 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)

Absolute Maximum Ratings Ta = 25 °C

Parameter

■ Marking Symbol: 05

Total power dissipation

Electrostatic discharge

Operating ambient temperature

(2 Diode total)

Junction temperature

Storage temperature

Packaging

Embossed type (Thermo-compression sealing) 10 000 pcs / reel (standard)

Symbol

PT

ESD

Τj

Topr

Tstg

*2: Test method:IEC61000_4_2(C = 150 pF,R = 330 Ω, Contact discharge:10 times)

	(0. 4) (0.	<u>2</u> <u>0.52</u> <u>4</u>				
lard)	<u>0.8</u> 1. Cathode1 2. Cathode2 3. Anode1,2					
	Panasonic	SSSMini3-F2-B				
	JEITA	SC-105AA				
Unit	Code	SOT-723				
mW						

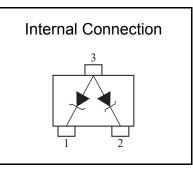
1.2

0.3

3

 ∞

ö



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

Solder in (Recommended land pattern)

Note) *1: Mounted on glass epoxy print board. (45 mm x 45 mm x 1 mm)

Parameter	Symbol	Conditions	Min	Тур	Max	Unit		
Forward voltage	VF	IF = 10 mA			1.0	V		
Zener voltage *1, *2	VZ	IZ = 5 mA	11.40		12.60	V		
Zener operating resistance	RZ	IZ = 5 mA			30	Ω		
Zener rise operating resistance	RZK	IZ = 0.5 mA			80	Ω		
Reverse current	IR	VR = 9 V			0.05	μA		
Temperature coefficient of zener voltage *3	SZ	IZ = 5 mA		8.5		mV/°C		

Rating

150

±10

150

-55 to +150

to +85

-40

kV

°C

°C

°C

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.

2. *1: The temperature must be controlled 25°C for VZ mesurement.

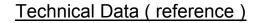
VZ value measured at other temperature must be adjusted to VZ (25°C)

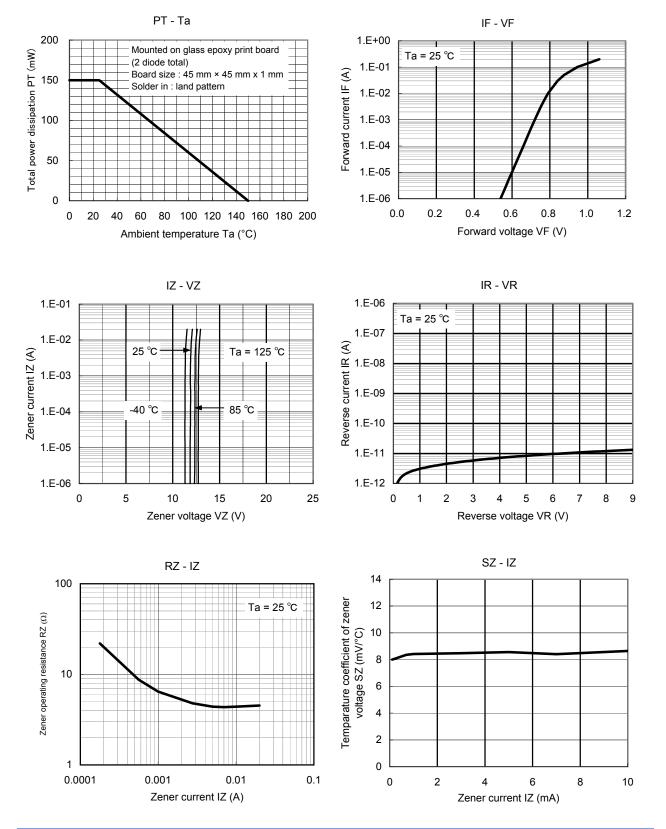
*2: VZ guaranted 20 ms after current flow.

*3: Tj = 25°C to 150°C



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Terminal capacitance Ct (pF)

10

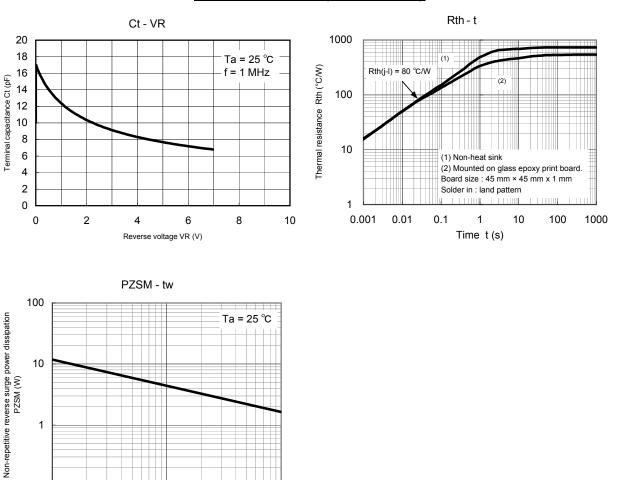
1

0.1 100

1000

Pulse width tw (µs)

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10000

Technical Data (reference)

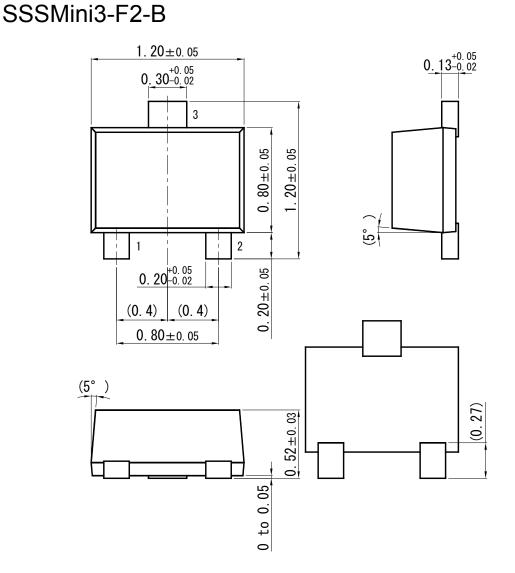


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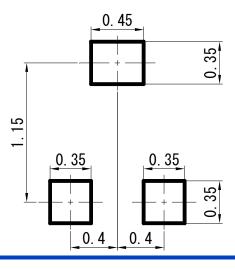


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Land Pattern (Reference) (Unit: mm)



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