# imall

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Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





## Zener Diode DZ5S120D0R

### DZ5S120D0R Silicon epitaxial planar type

For surge absorption circuit DZ5J120D in SSMini5 type package

#### Features

- · Excellent rising characteristics of zener current Iz
- Low zener operating resistance RzHalogen-free / RoHS compliant
  - (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol:05
- Basic Part Number : Dual DZ3X120D (Common anode)

Packaging Embossed type (Thermo-compression sealing) 8 000 pcs / reel (standard)

■ Absolute Maximum Ratings Ta = 25 °C

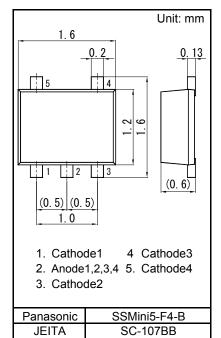
Parameter	Symbol	Rating	Unit		
Total power dissipation <sup>*1</sup>	PT	150	mW		
Electrostatic discharge *2	ESD	±10	kV		
Junction temperature	Tj	150	°C		
Operating ambient temperature	Topr	-40 to +85	°C		
Storage temperature	Tstg	-55 to +150	°C		

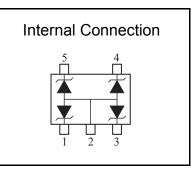
Storage temperatureTstg-55 to +150Note) \*1: Mounted on glass epoxy print board. ( 45 mm x 45 mm x 1 mm)

(4Diode total)

Solder in ( 0.35 mm x 0.40 mm)

\*2: Test method:IEC61000\_4\_2(C = 150 pF,R = 330 Ω, Contact discharge:10 times)





SOT-665

Code

#### ■ 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 <sup>*1, *2</sup>	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		

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.

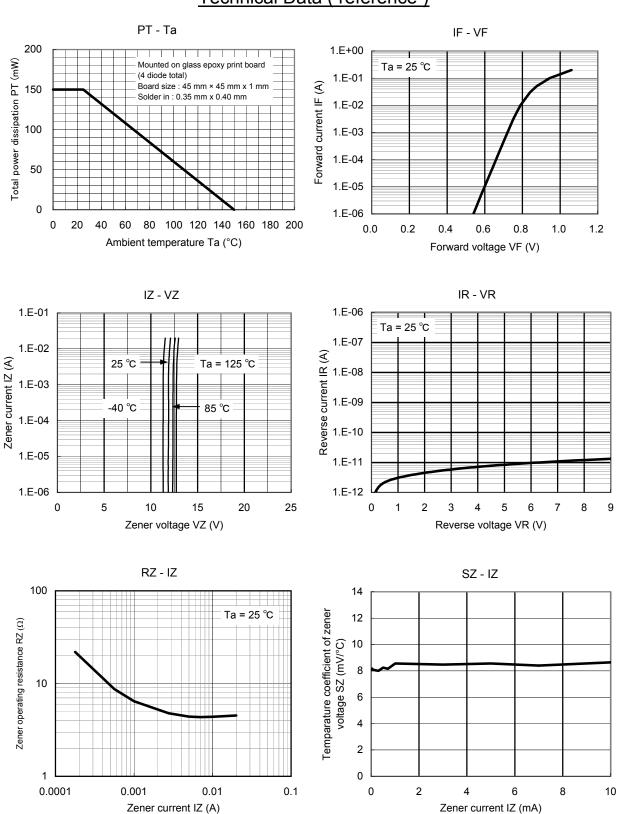
VZ value measured at other temperature must be adjusted to VZ (25°C)

\*2: VZ guaranted 20 ms after current flow.

\*3: Tj = 25°C to 150°C



Zener Diode DZ5S120D0R



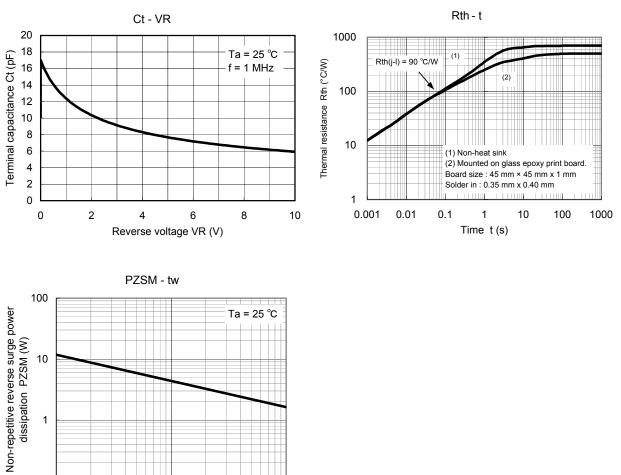
Technical Data (reference)

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Established : 2010-08-05 Revised : 2013-10-28



Zener Diode DZ5S120D0R



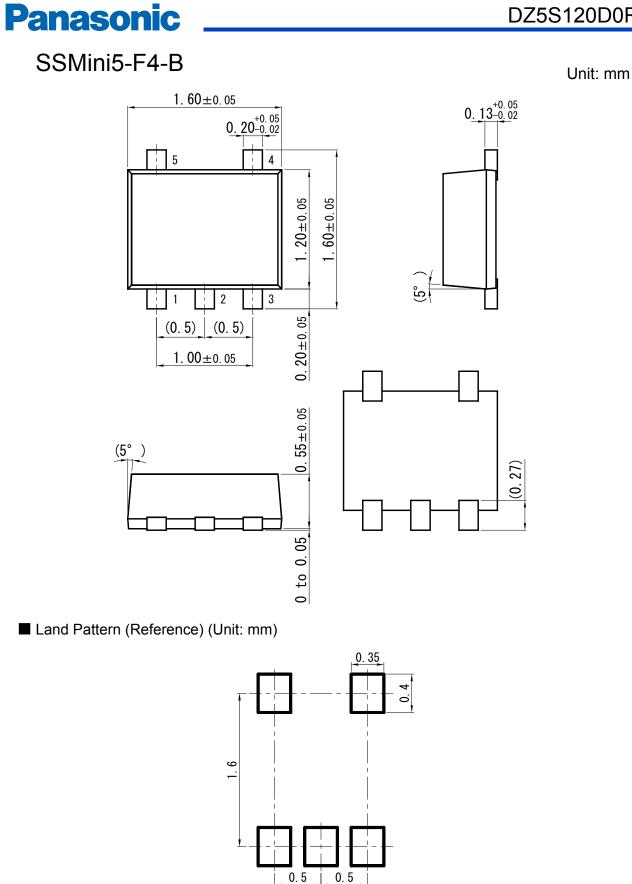
10000

Technical Data (reference)

0.1 100

1000

Pulse width tw (µs)



Zener Diode DZ5S120D0R

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