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# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







Zener Diode

### **DZ5J100D0R**

# **Panasonic**

### DZ5J100D0R

## Silicon epitaxial planar type

For surge absorption circuit DZ5X100D in SMini5 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:04
- Basic Part Number : Dual DZ3X100D (Common anode)

#### ■ Packaging

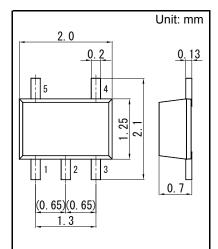
Embossed type (Thermo-compression sealing) 3 000 pcs / reel (standard)

#### ■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit				
Total power dissipation *1	PT	200	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				

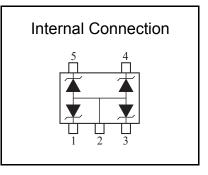
Note) \*1: PT = 200 mW achieved with a printed circuit board. (4Diode total)

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



- 1. Cathode1 4 Cathode3
- 2. Anode1,2,3,4 5. Cathode4
- 3. Cathode2

Panasonic	SMini5-F3-B
JEITA	SC-113CB
Code	SOT-353



#### ■ 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	9.50		10.50	V
Zener operating resistance	RZ	IZ = 5 mA			30	Ω
Zener rise operating resistance	RZK	IZ = 0.5 mA			60	Ω
Reverse current	IR	VR = 7 V			0.05	μA
Temperature coefficient of zener voltage *3	SZ	IZ = 5 mA		6.5		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.

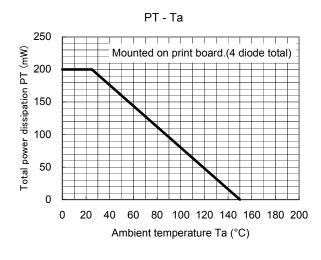
VZ value measured at other temperature must be adjusted to VZ (25 $^{\circ}$ C)

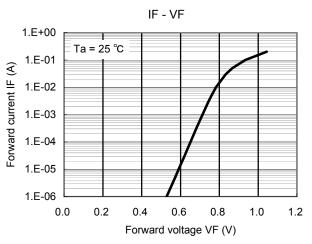
- \*2: VZ guaranted 20 ms after current flow.
- \*3: Tj =  $25^{\circ}$ C to  $150^{\circ}$ C

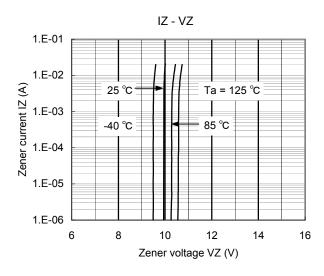
Established : 2011-02-16 Revised : 2013-11-01 **Panasonic** 

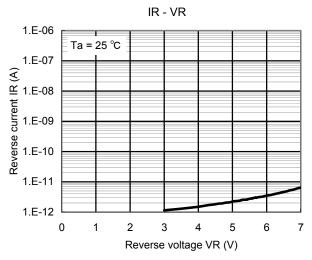
Zener Diode DZ5J100D0R

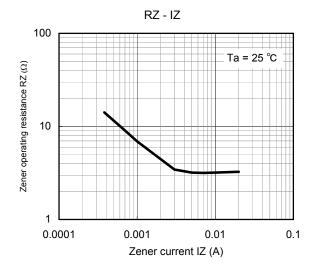
### Technical Data (reference)

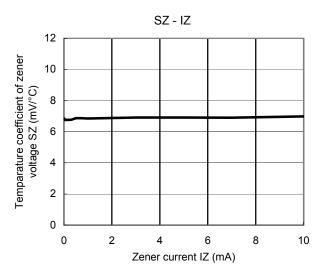












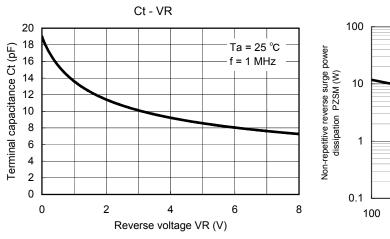
Established: 2011-02-16 Revised: 2013-11-01 Revision. 2

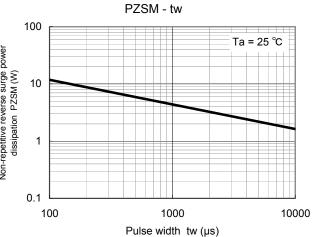
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Zener Diode

## DZ5J100D0R

## Technical Data (reference)





Established: 2011-02-16 Revised: 2013-11-01

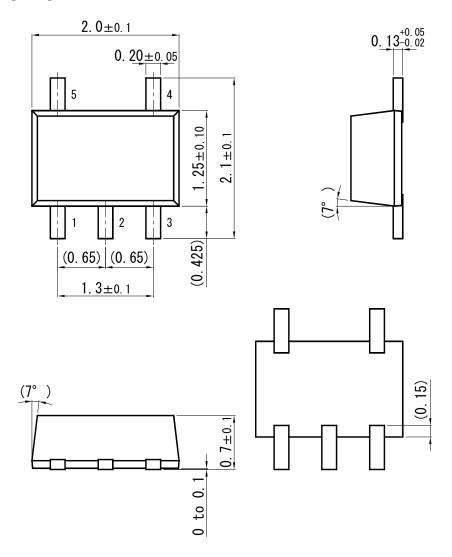
Zener Diode

## DZ5J100D0R

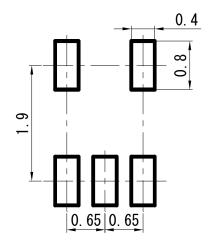
# SMini5-F3-B

**Panasonic** 

Unit: mm



#### ■ Land Pattern (Reference) (Unit: mm)



Established: 2011-02-16 Revised: 2013-11-01

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