

# DZ5J120D0R

## Silicon epitaxial planar type

For surge absorption circuit  
 DZ5X120D in SMini5 type package

■ Features

- Excellent rising characteristics of zener current I<sub>Z</sub>
- Low zener operating resistance R<sub>Z</sub>
- Halogen-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) 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	T <sub>j</sub>	150	°C
Operating ambient temperature	T <sub>opr</sub>	-40 to +85	°C
Storage temperature	T <sub>stg</sub>	-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 Ω, Contact discharge:10 times)

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	V <sub>F</sub>	I <sub>F</sub> = 10 mA			1.0	V
Zener voltage *1, *2	V <sub>Z</sub>	I <sub>Z</sub> = 5 mA	11.40		12.60	V
Zener operating resistance	R <sub>Z</sub>	I <sub>Z</sub> = 5 mA			30	Ω
Zener rise operating resistance	R <sub>ZK</sub>	I <sub>Z</sub> = 0.5 mA			80	Ω
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 9 V			0.05	μA
Temperature coefficient of zener voltage *3	SZ	I <sub>Z</sub> = 5 mA		8.5		mV/°C

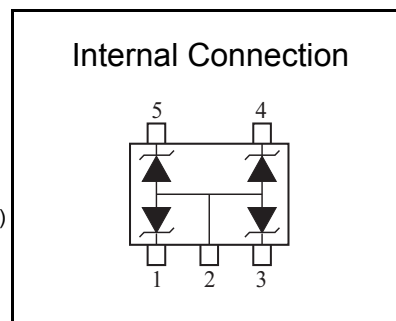
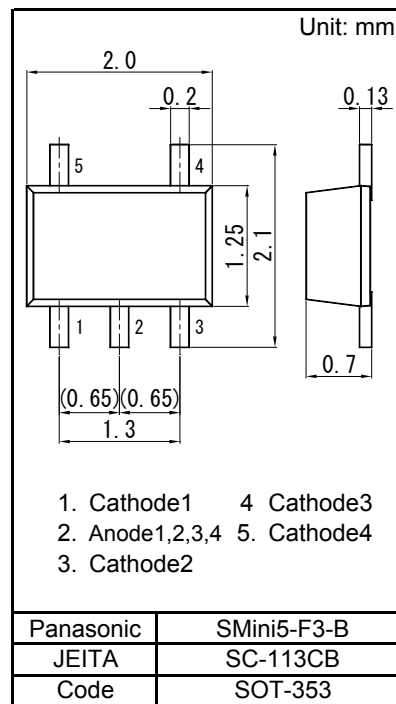
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.

2. \*1: The temperature must be controlled 25°C for V<sub>Z</sub> measurement.

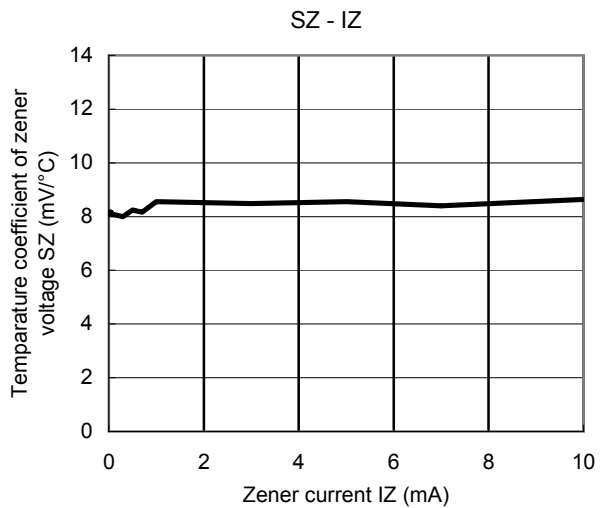
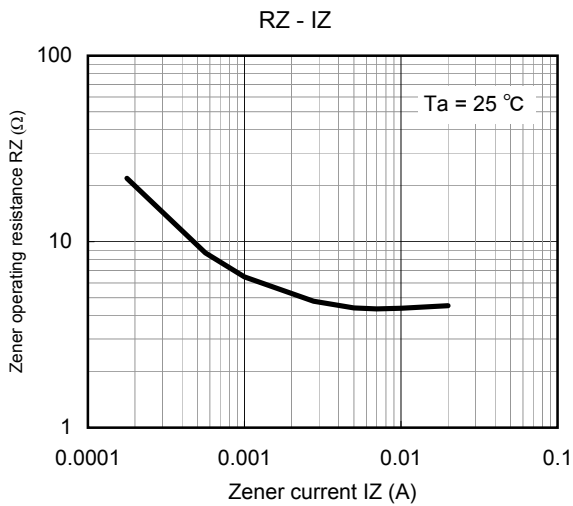
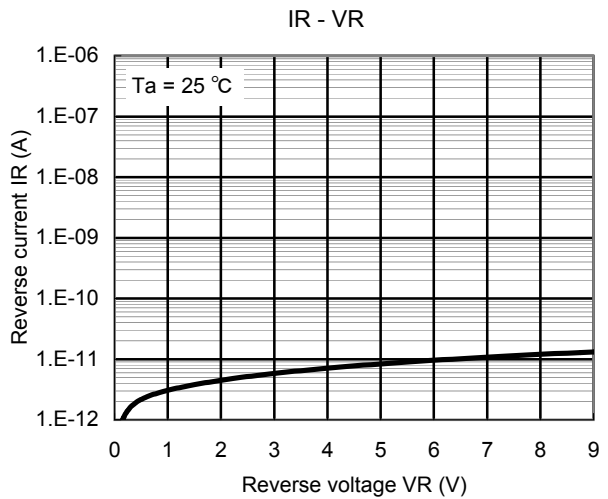
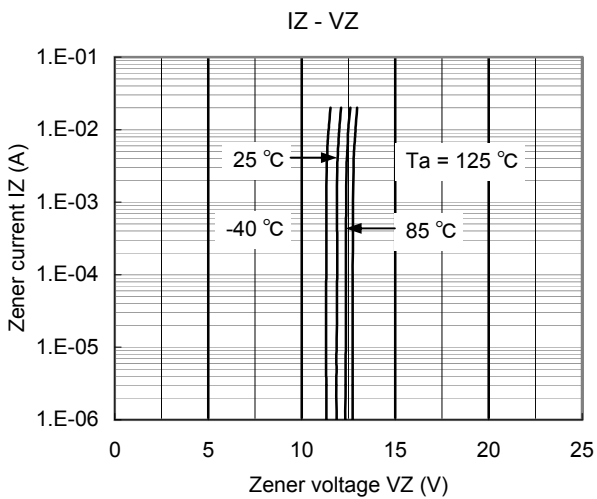
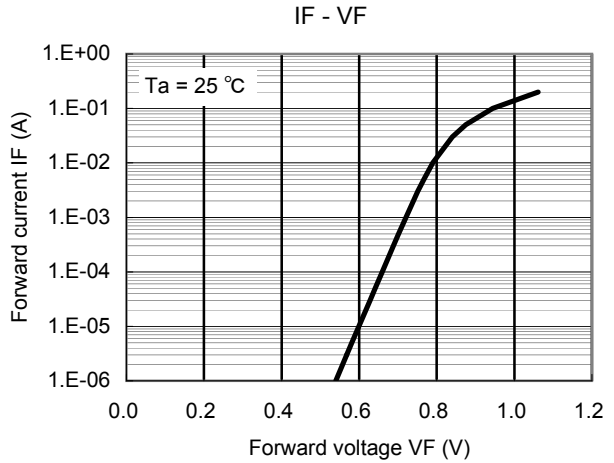
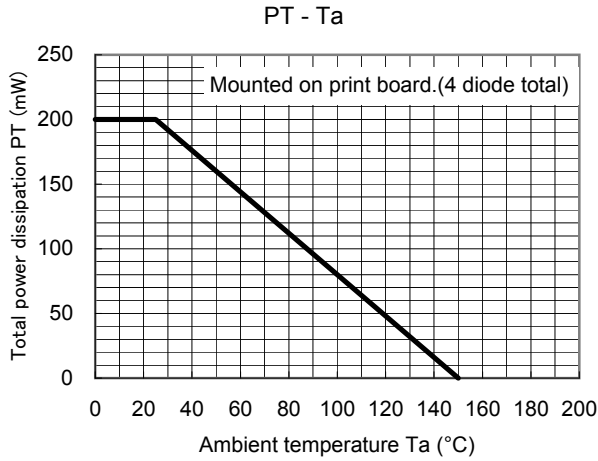
V<sub>Z</sub> value measured at other temperature must be adjusted to V<sub>Z</sub> (25°C)

\*2: V<sub>Z</sub> guaranteed 20 ms after current flow.

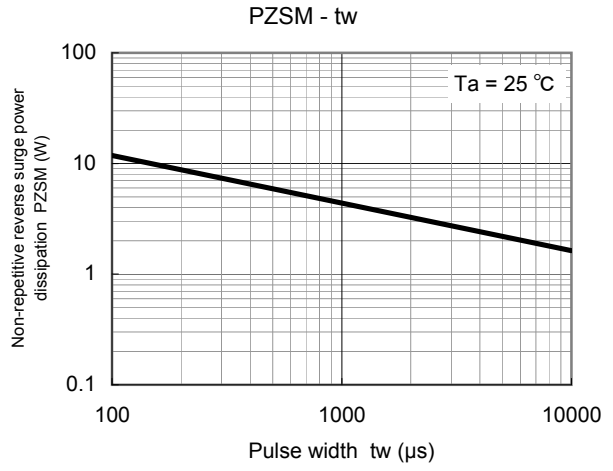
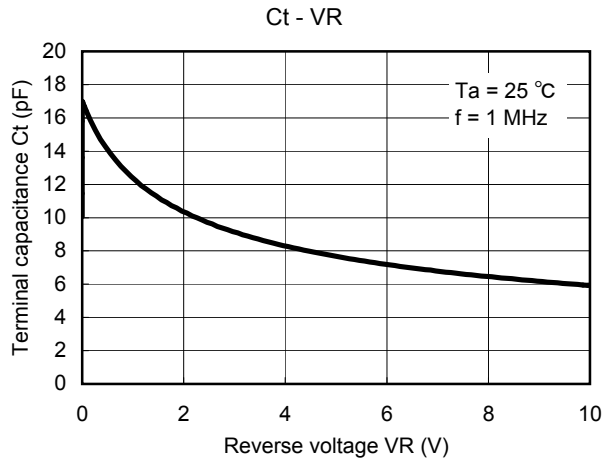
\*3: T<sub>j</sub> = 25°C to 150°C



Technical Data ( reference )

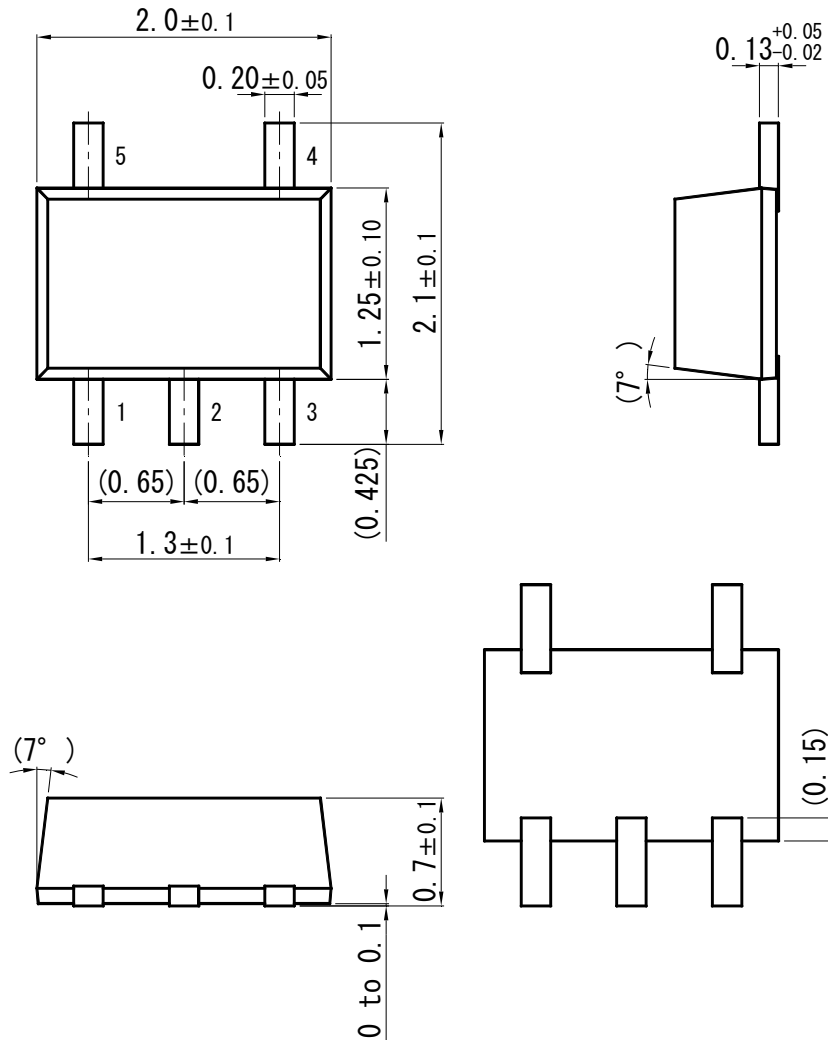


Technical Data ( reference )

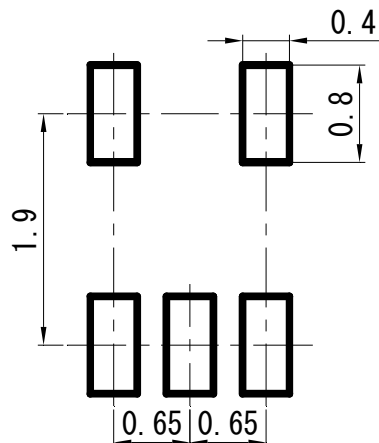


SMini5-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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