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DZ5J120D0R

Silicon epitaxial planar type

For surge absorption circuit
 DZ5X120D in SMini5 type package

■ Features

- Excellent rising characteristics of zener current I_Z
- Low zener operating resistance R_Z
- 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 _j	150	°C
Operating ambient temperature	T _{opr}	-40 to +85	°C
Storage temperature	T _{stg}	-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 _F	I _F = 10 mA			1.0	V
Zener voltage *1, *2	V _Z	I _Z = 5 mA	11.40		12.60	V
Zener operating resistance	R _Z	I _Z = 5 mA			30	Ω
Zener rise operating resistance	R _{ZK}	I _Z = 0.5 mA			80	Ω
Reverse current	I _R	V _R = 9 V			0.05	μA
Temperature coefficient of zener voltage *3	SZ	I _Z = 5 mA		8.5		mV/°C

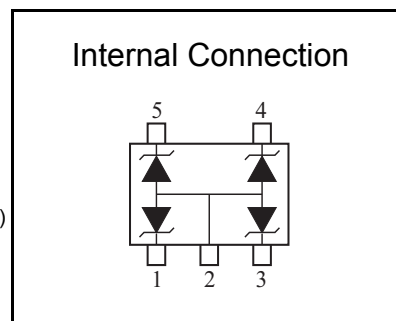
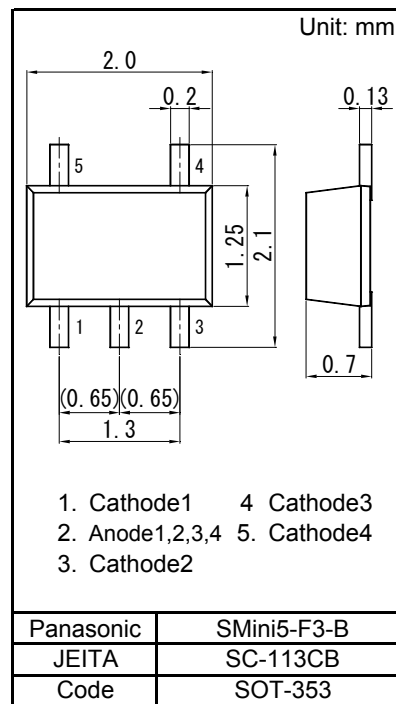
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.

2. *1: The temperature must be controlled 25°C for V_Z measurement.

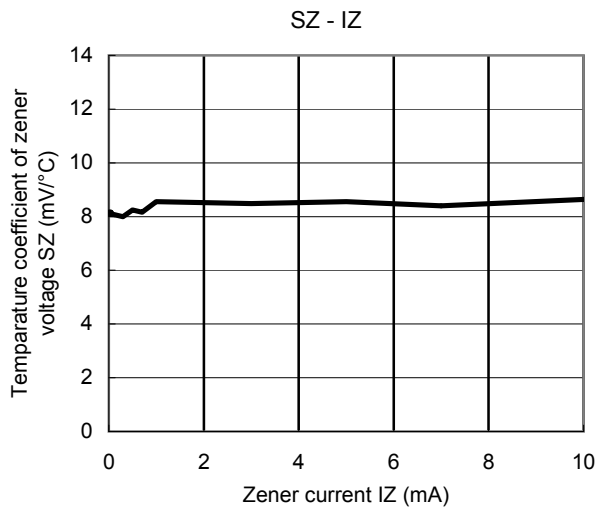
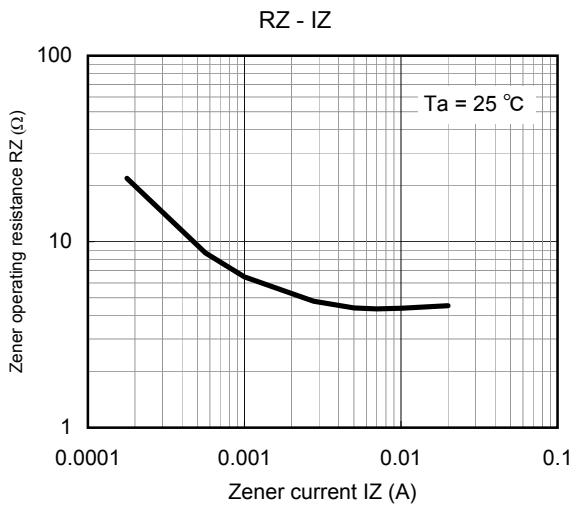
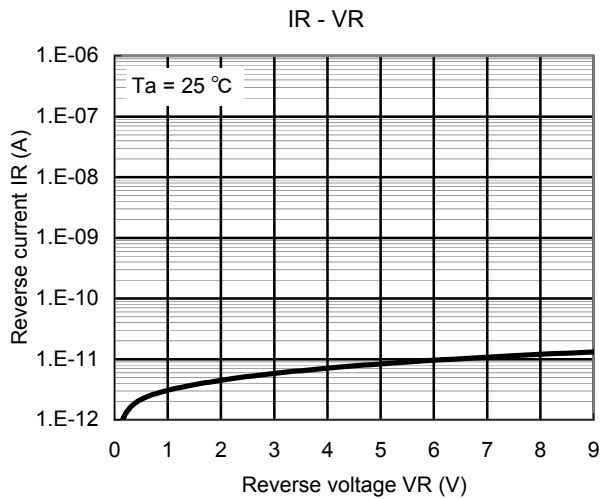
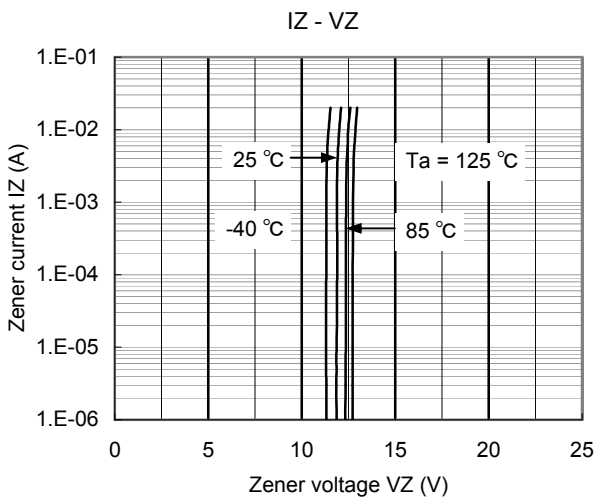
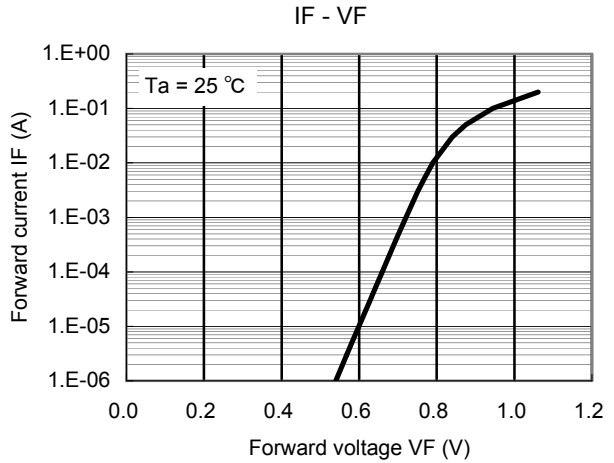
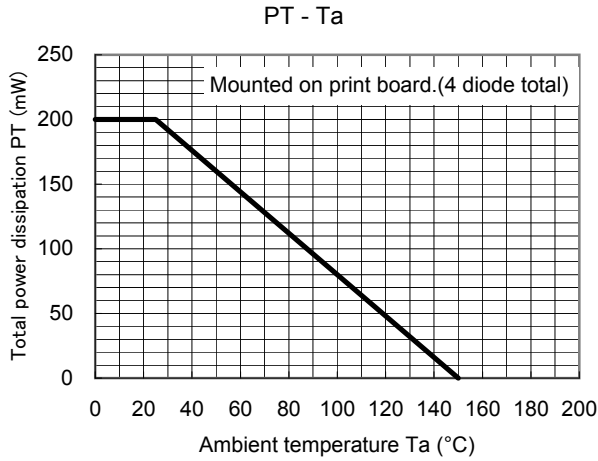
V_Z value measured at other temperature must be adjusted to V_Z (25°C)

*2: V_Z guaranteed 20 ms after current flow.

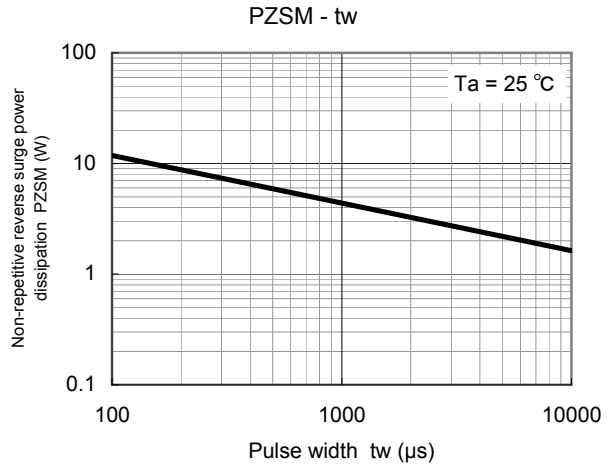
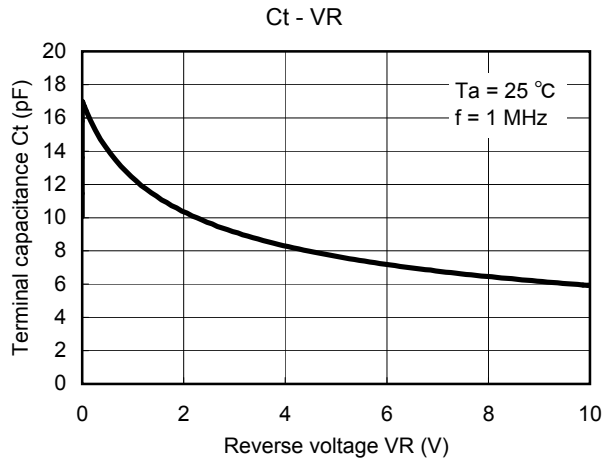
*3: T_j = 25°C to 150°C



Technical Data (reference)

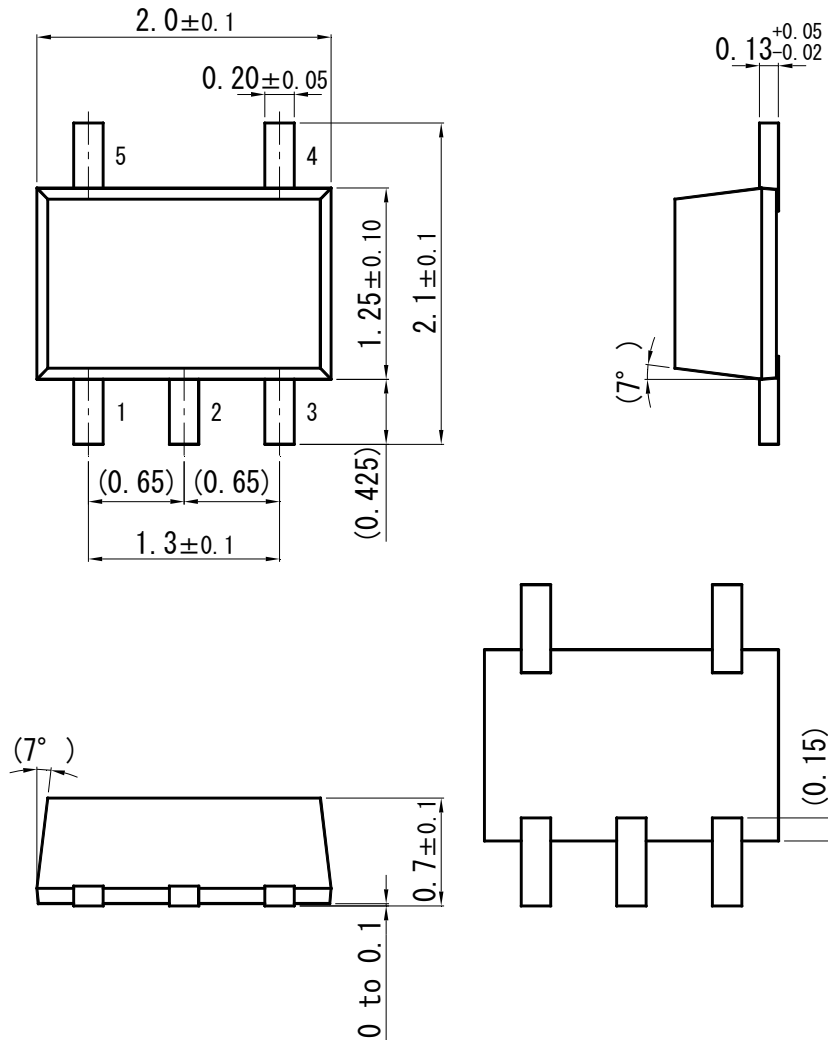


Technical Data (reference)

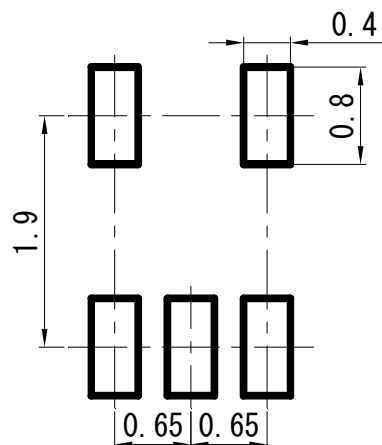


SMini5-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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