



DZ5S120D0R

Silicon epitaxial planar type

For surge absorption circuit

DZ5J120D in SSMini5 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) 8 000 pcs / reel (standard)

■ Absolute Maximum Ratings Ta = 25 °C

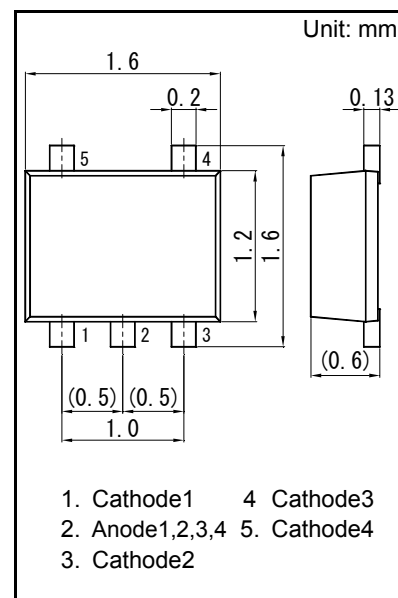
Parameter	Symbol	Rating	Unit
Total power dissipation ^{*1}	PT	150	mW
Electrostatic discharge ^{*2}	ESD	±10	kV
Junction temperature	Tj	150	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-55 to +150	°C

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

(4Diode total)

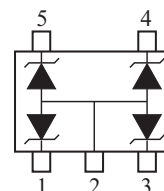
Solder in (0.35 mm x 0.40 mm)

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



Panasonic	SSMini5-F4-B
JEITA	SC-107BB
Code	SOT-665

Internal Connection



■ Electrical Characteristics $T_a = 25\text{ }^{\circ}\text{C} \pm 3\text{ }^{\circ}\text{C}$

Parameter	Symbol	Conditions	Min	Typ	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

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

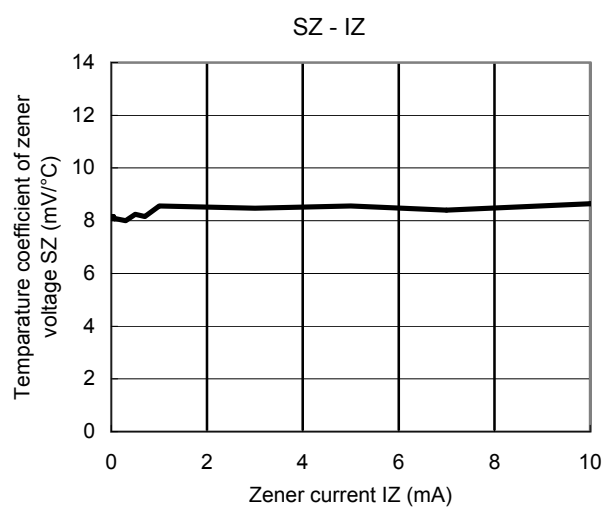
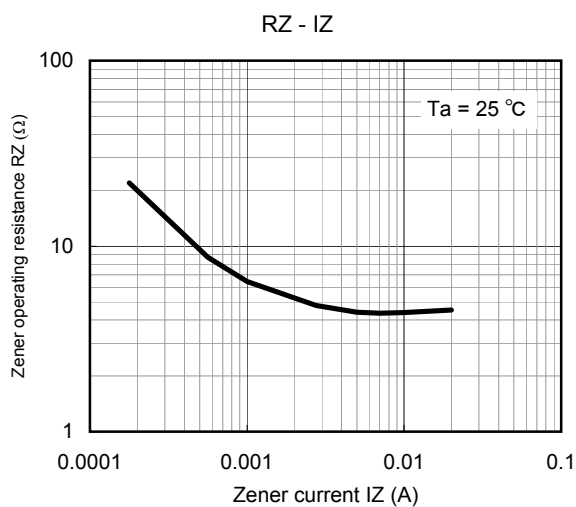
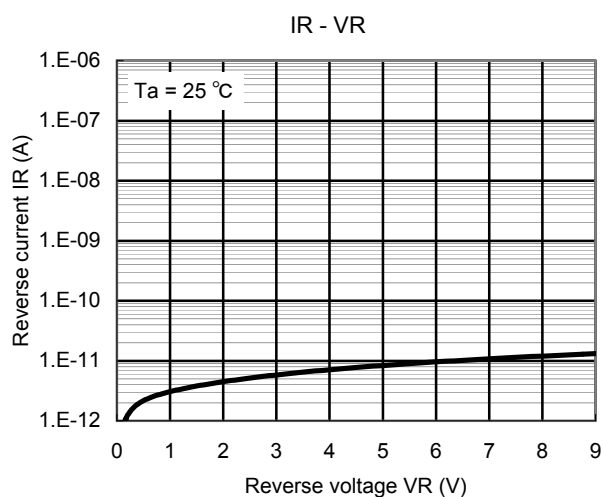
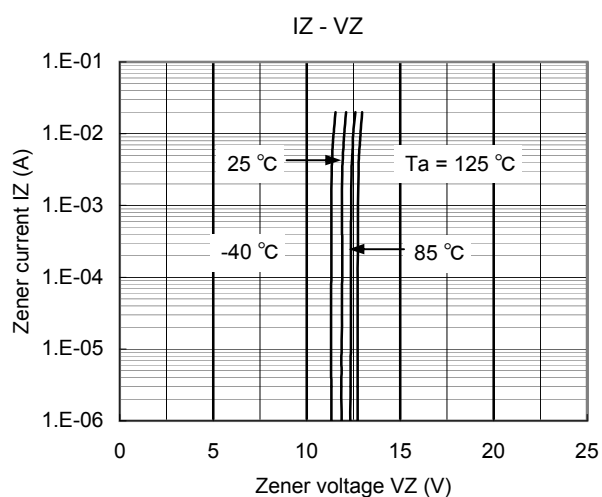
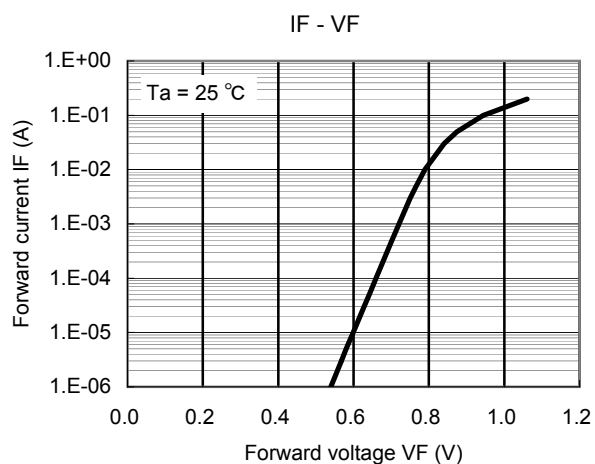
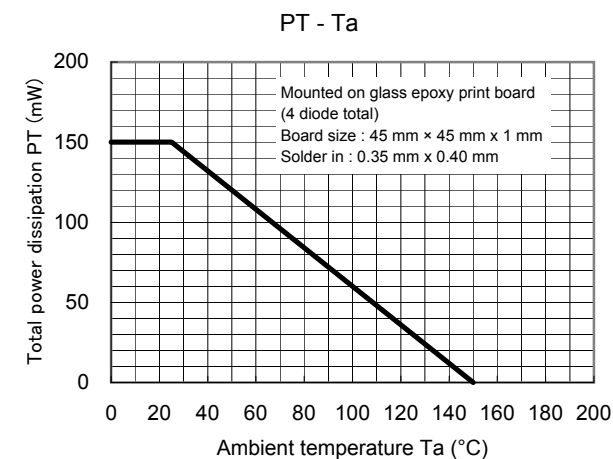
2. *1: The temperature must be controlled 25°C for VZ measurement.

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

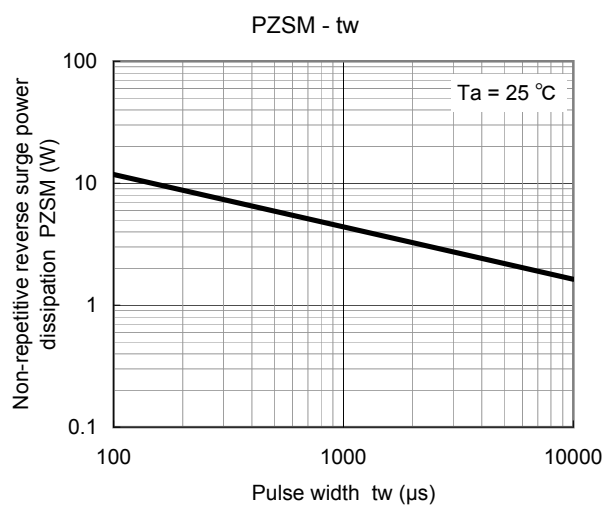
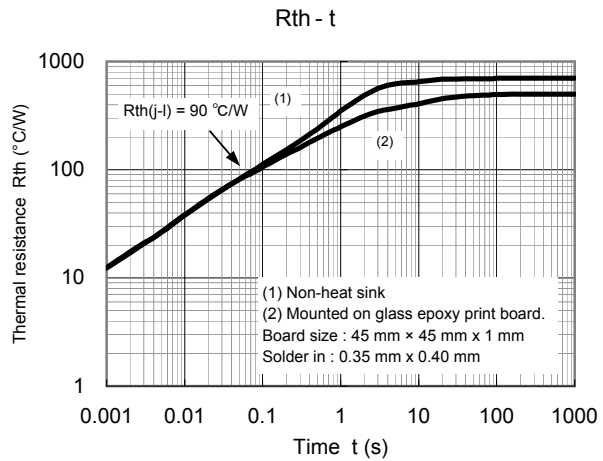
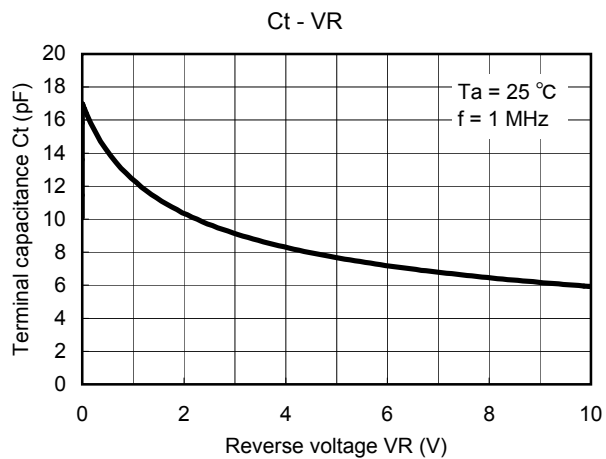
*2: VZ guaranted 20 ms after current flow.

*3: $T_j = 25^\circ\text{C}$ to 150°C

Technical Data (reference)

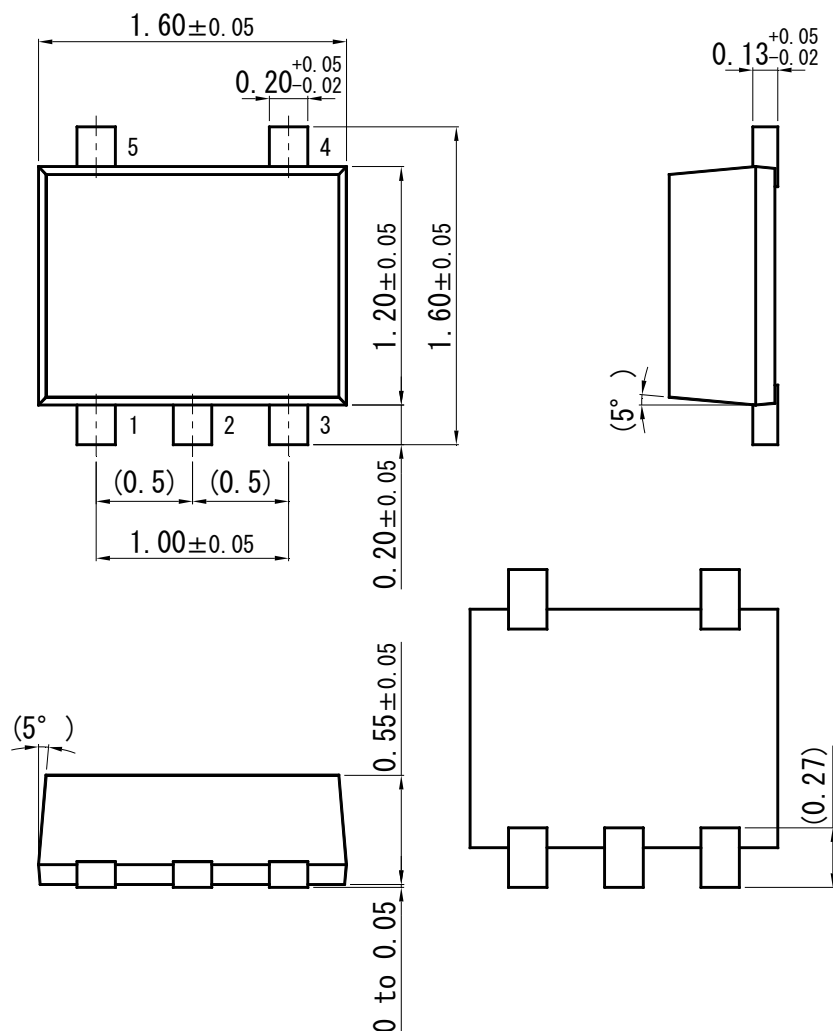


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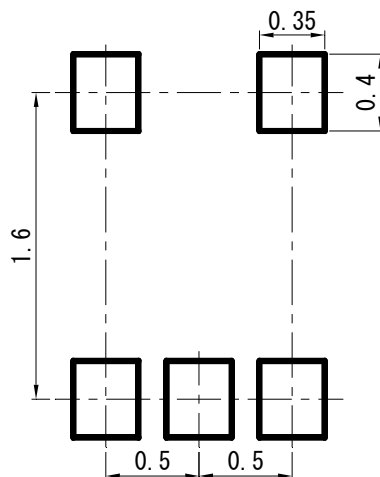


SSMini5-F4-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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