

DZ5J082D0R

Silicon epitaxial planar type

For surge absorption circuit

DZ5X082D 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: 03

■ Basic Part Number :

Dual DZ3X082D (Common anode)

■ Packaging

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

■ Absolute Maximum Ratings $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Rating	Unit
Total power dissipation ^{*1}	PT	200	mW
Electrostatic discharge ^{*2}	ESD	±10	kV
Junction temperature	T_j	150	$^{\circ}\text{C}$
Operating ambient temperature	T_{opr}	-40 to +85	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^{\circ}\text{C}$

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	VF	$I_F = 10\text{ mA}$			1.0	V
Zener voltage ^{*1, *2}	VZ	$I_Z = 5\text{ mA}$	7.79		8.61	V
Zener operating resistance	RZ	$I_Z = 5\text{ mA}$			30	Ω
Zener rise operating resistance	RZK	$I_Z = 0.5\text{ mA}$			60	Ω
Reverse current	IR	$V_R = 5\text{ V}$			0.1	μA
Temperature coefficient of zener voltage ^{*3}	SZ	$I_Z = 5\text{ mA}$		4.8		mV/ $^{\circ}\text{C}$

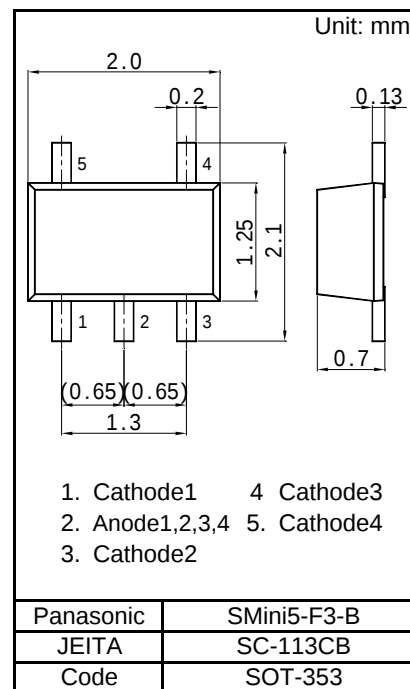
Note) 1 Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.

2. ^{*1}: The temperature must be controlled 25 $^{\circ}\text{C}$ for VZ measurement.

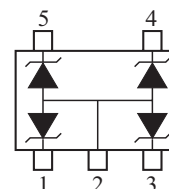
VZ value measured at other temperature must be adjusted to VZ (25 $^{\circ}\text{C}$)

^{*2}: VZ guaranteed 20 ms after current flow.

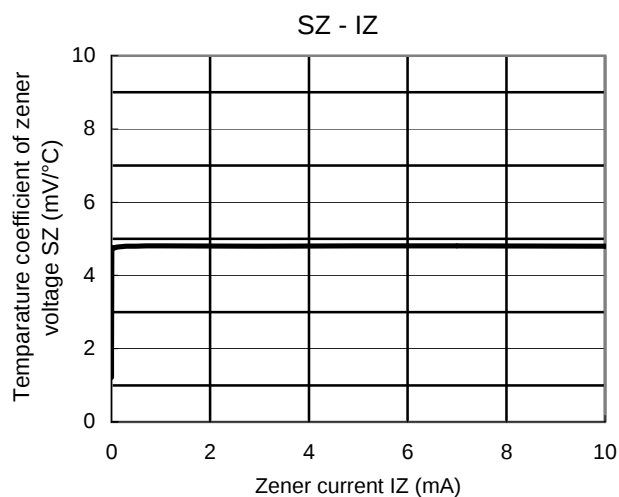
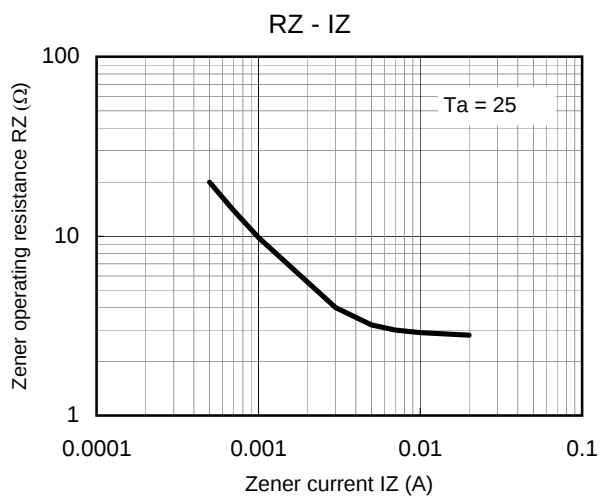
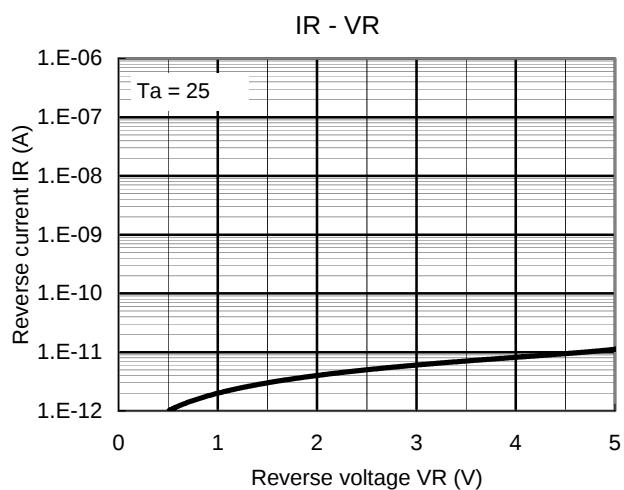
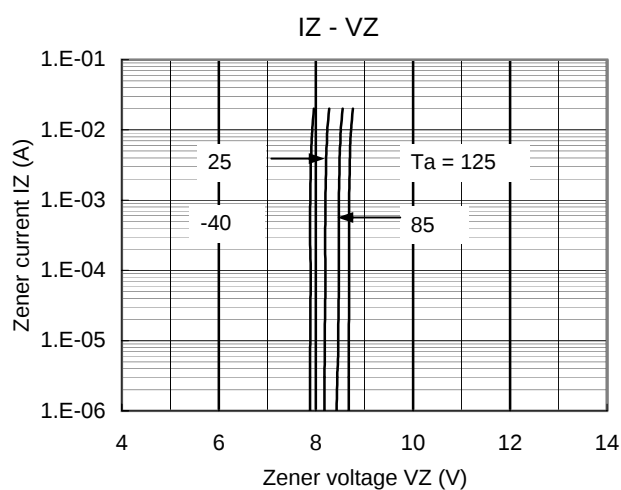
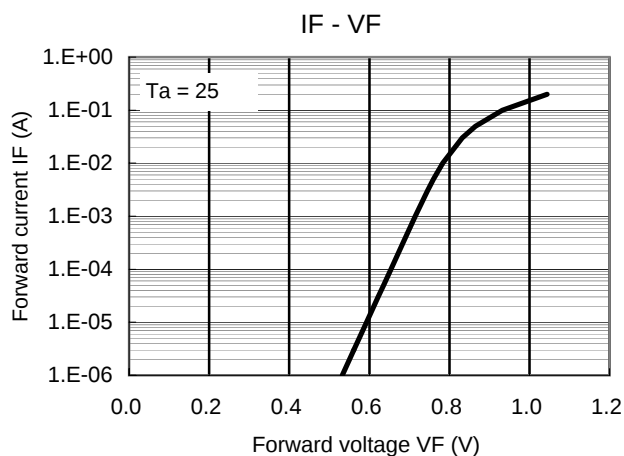
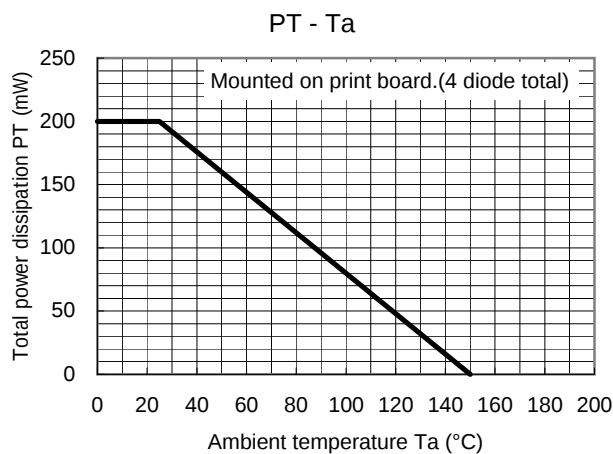
^{*3}: $T_j = 25^{\circ}\text{C}$ to 150 $^{\circ}\text{C}$



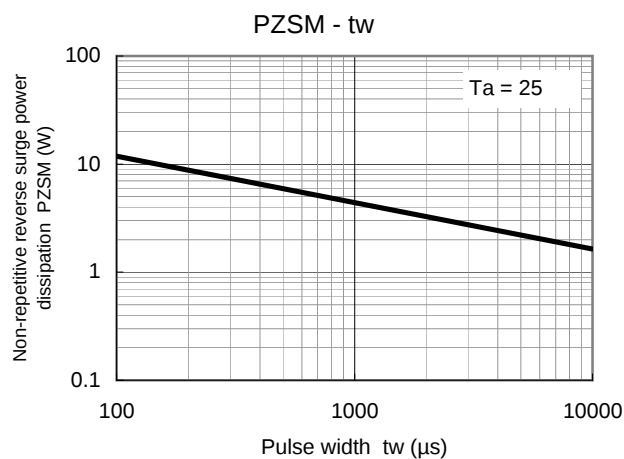
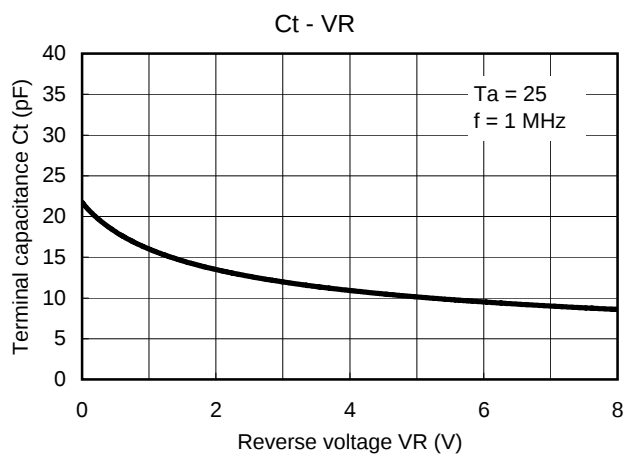
Internal Connection



Technical Data (reference)



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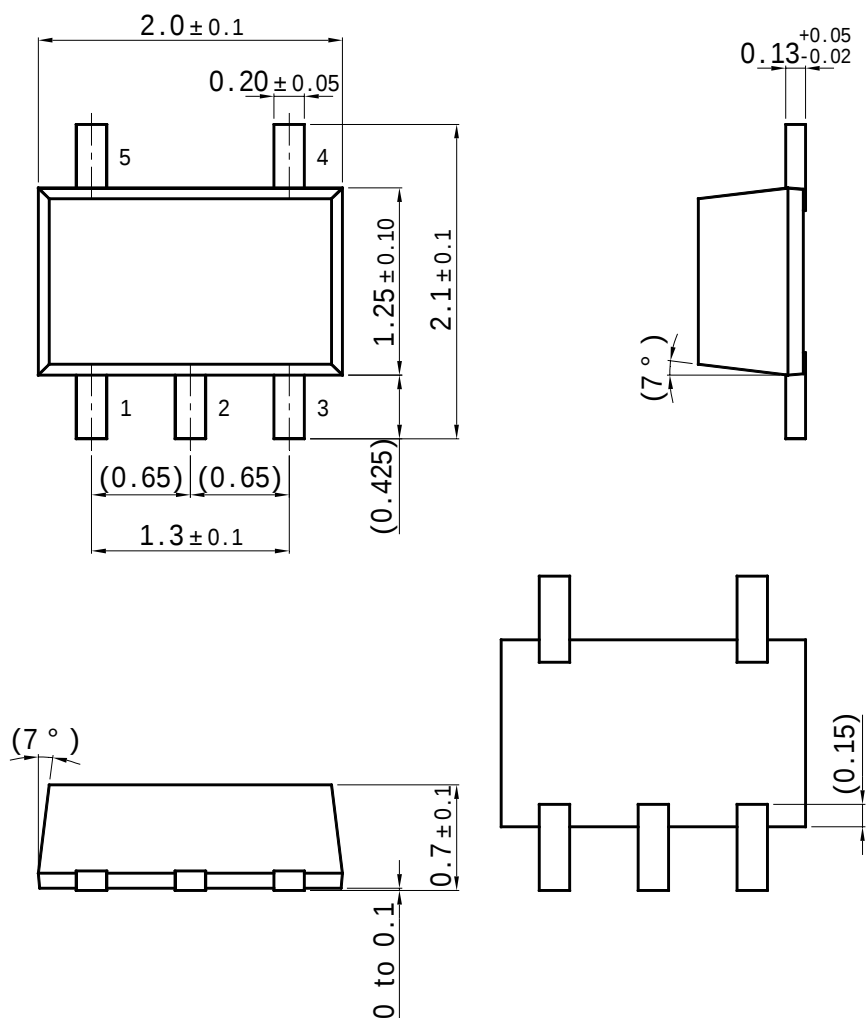


Panasonic

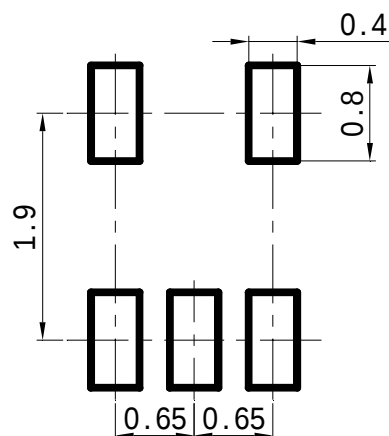
Zener Diode
DZ5J082D0R

SMini5-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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