

DZ3X120D0L

Silicon epitaxial planar type

For surge absorption circuit

■ 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

■ Packaging

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

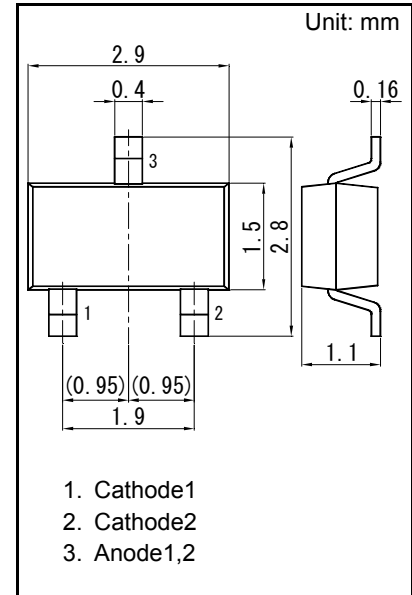
■ Absolute Maximum Ratings Ta = 25 °C

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

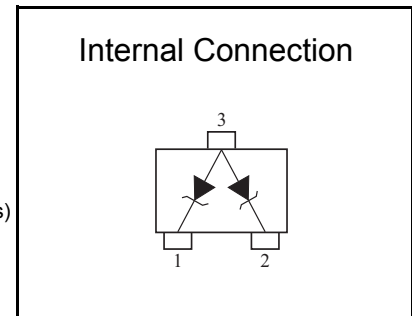
Note) *1: Mounted on glass epoxy print board. (45 mm x 45 mm x 1 mm)
(2 Diode total)

Solder in (1.0 mm x 1.0 mm)

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



Panasonic	Mini3-G3-B
JEITA	SC-59A
Code	TO-236AA/SOT-23



■ 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	11.4		12.6	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.

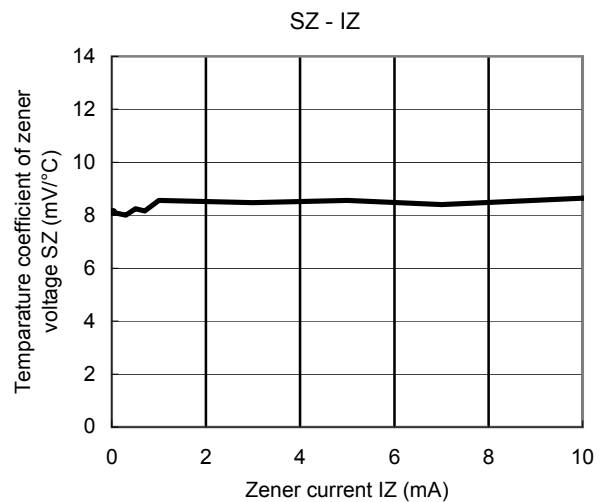
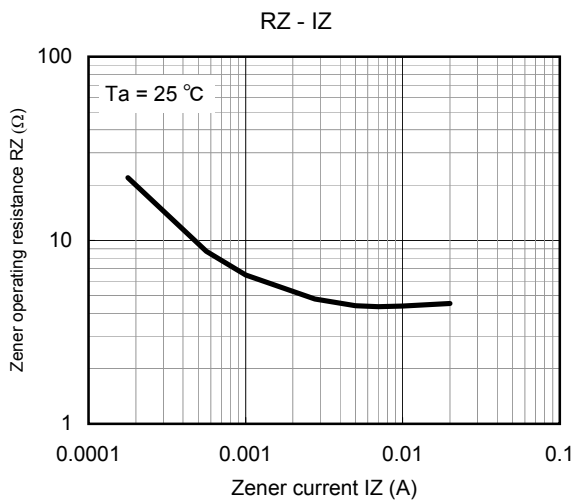
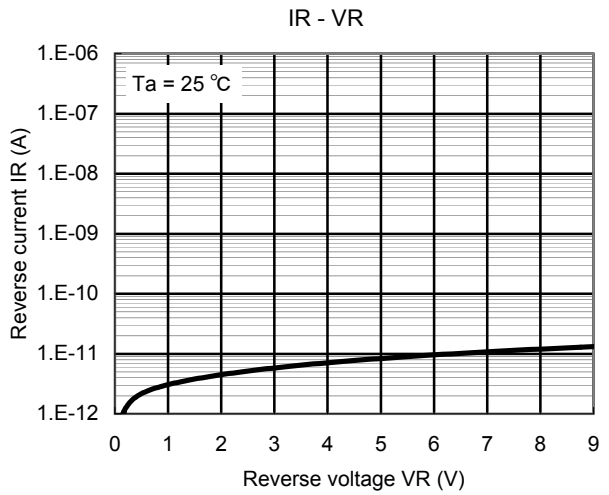
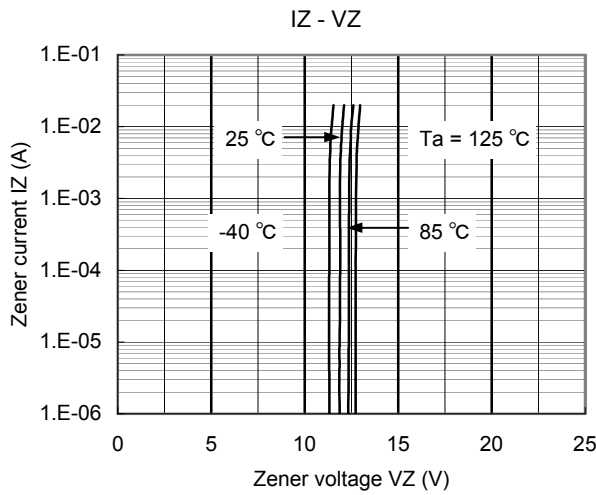
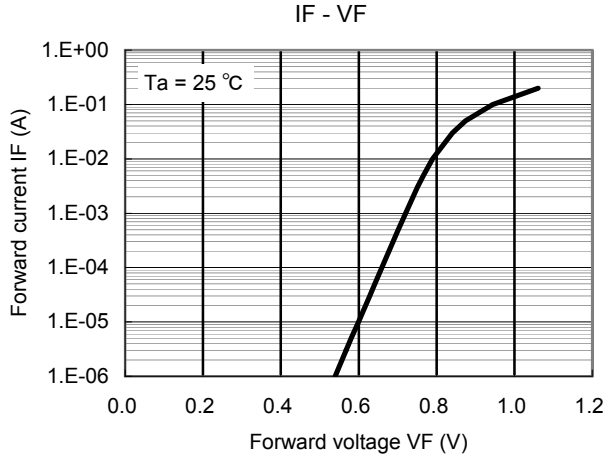
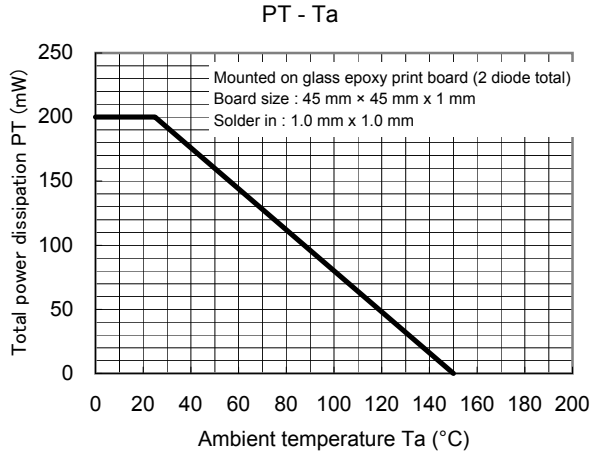
2. *1: The temperature must be controlled 25°C for V_Z measurement.

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

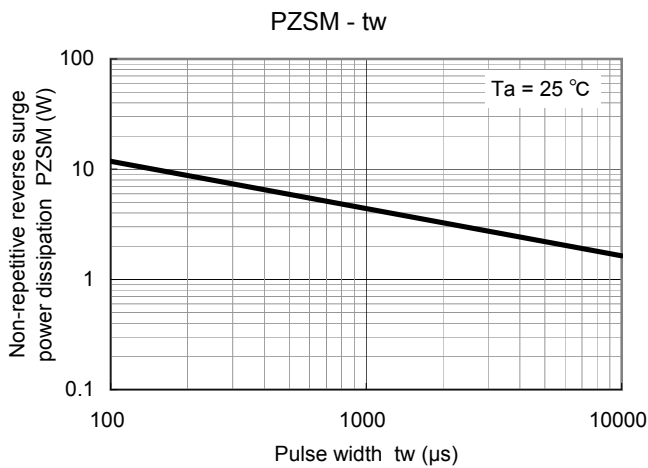
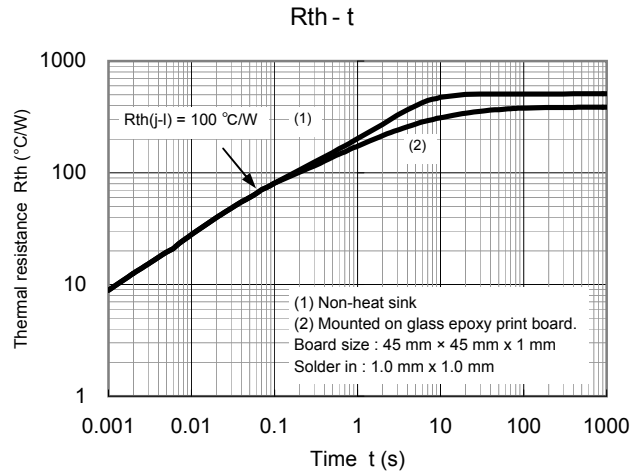
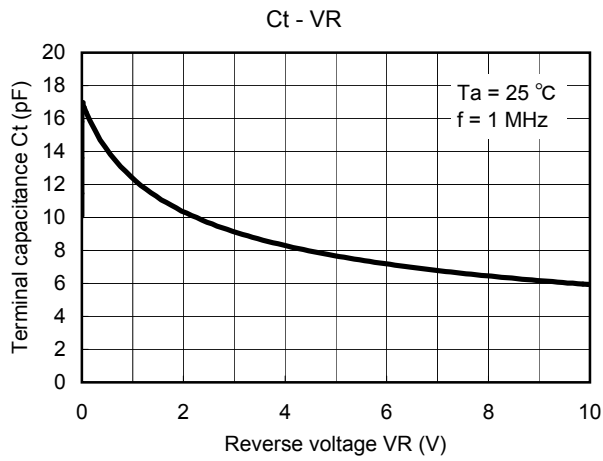
*2: V_Z guaranteed 20 ms after current flow.

*3: T_j = 25°C to 150°C

Technical Data (reference)



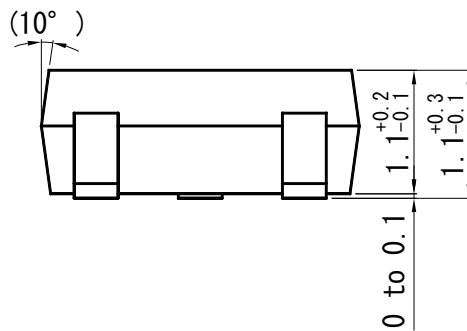
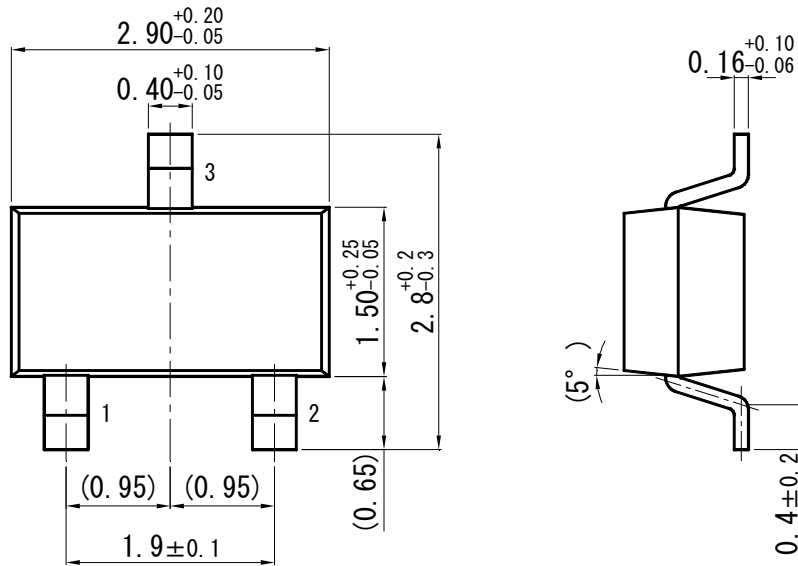
Technical Data (reference)



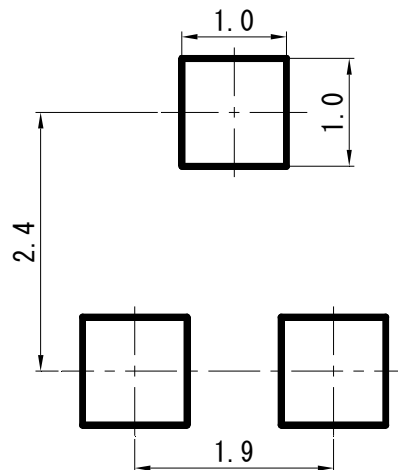


Mini3-G3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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