

**DZ3X120D0L**

Silicon epitaxial planar type

For surge absorption circuit

■ 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

■ Packaging

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

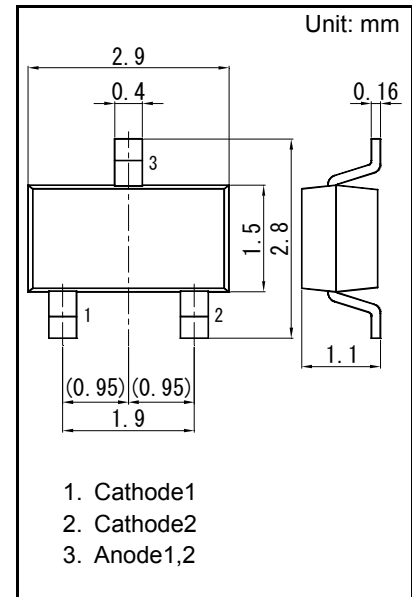
■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit
Total power dissipation <sup>*1</sup>	PT	200	mW
Electrostatic discharge <sup>*2</sup>	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

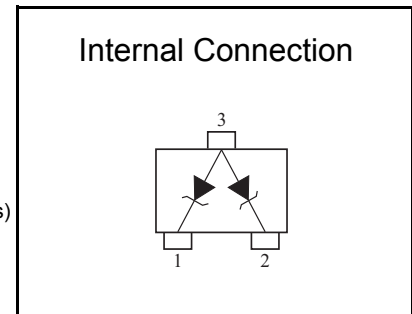
Note) \*1: Mounted on glass epoxy print board. ( 45 mm x 45 mm x 1 mm)  
 (2 Diode total)

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 <sub>F</sub>	I <sub>F</sub> = 10 mA			1.0	V
Zener voltage <sup>*1, *2</sup>	V <sub>Z</sub>	I <sub>Z</sub> = 5 mA	11.4		12.6	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 <sup>*3</sup>	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.

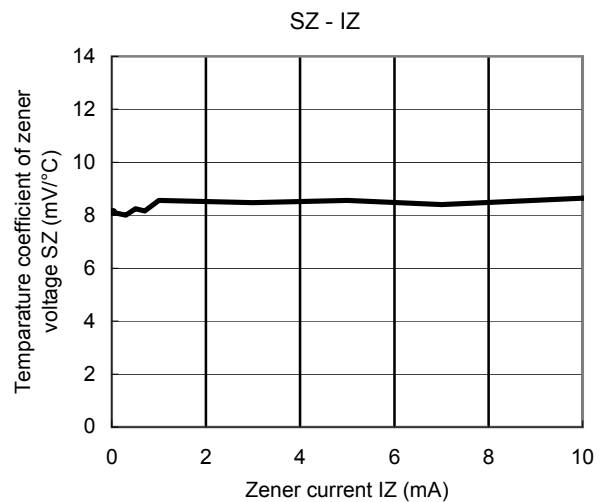
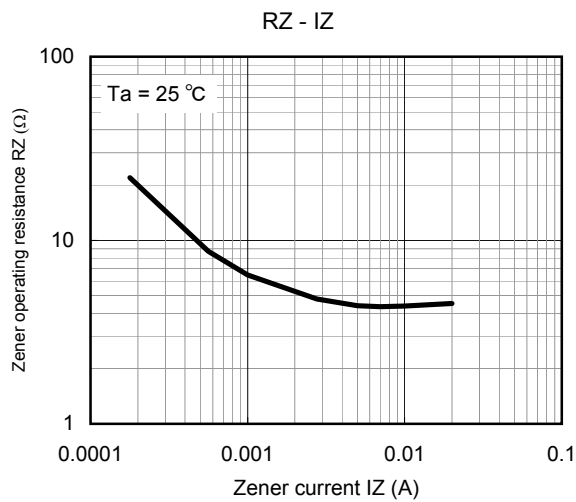
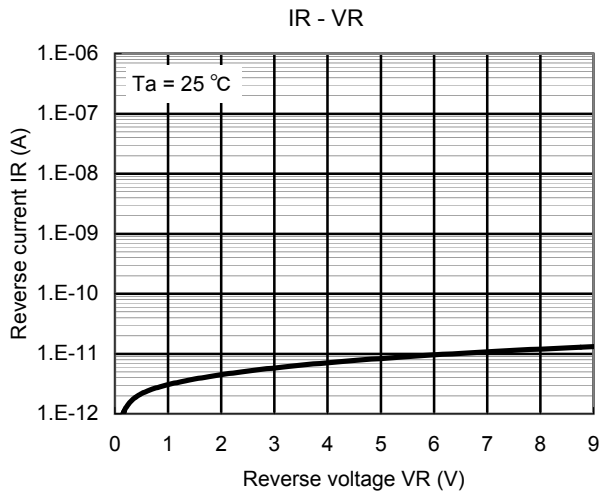
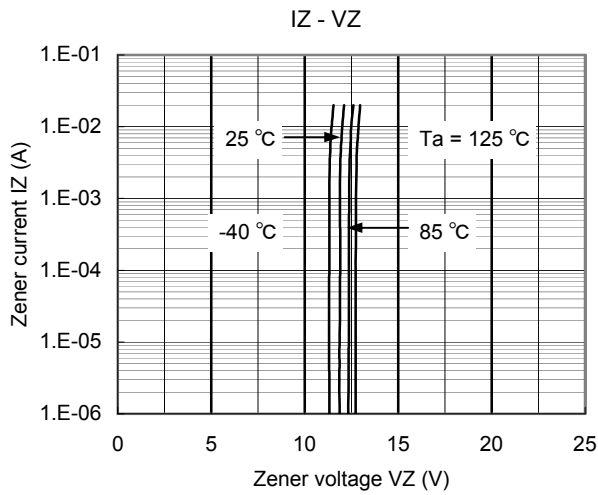
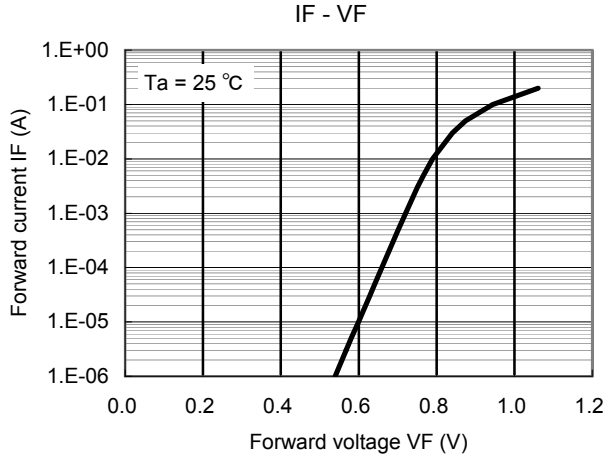
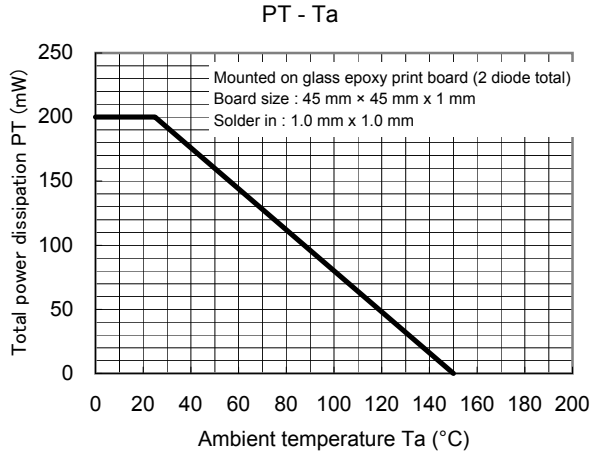
2. \*1: The temperature must be controlled 25°C for V<sub>Z</sub> measurement.

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

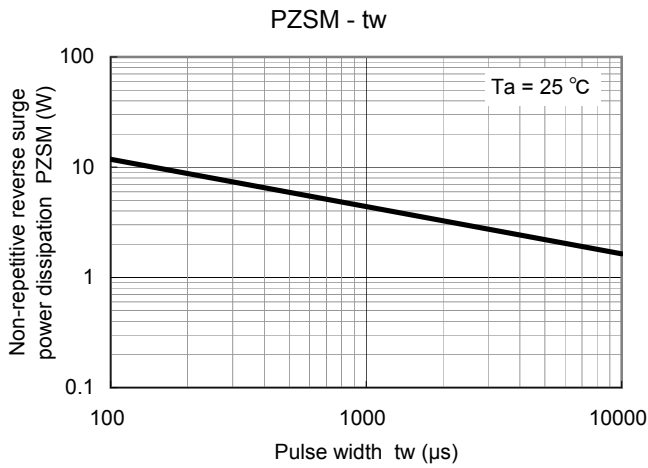
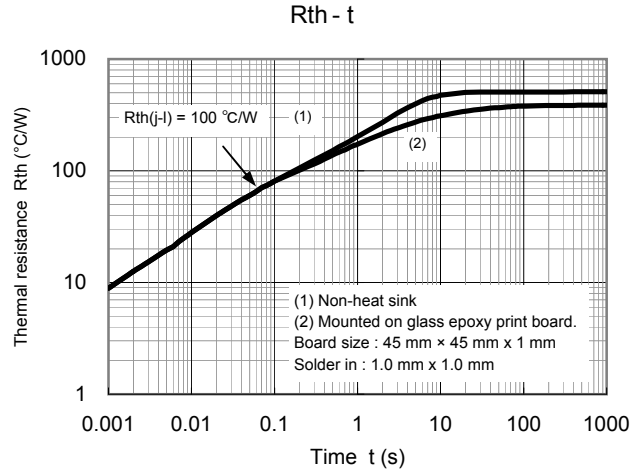
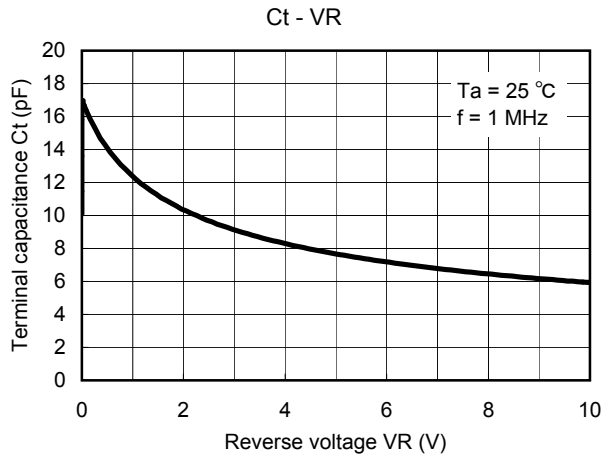
\*2: V<sub>Z</sub> guaranteed 20 ms after current flow.

\*3: T<sub>j</sub> = 25°C to 150°C

Technical Data ( reference )

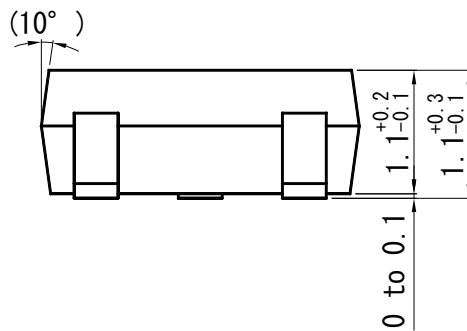
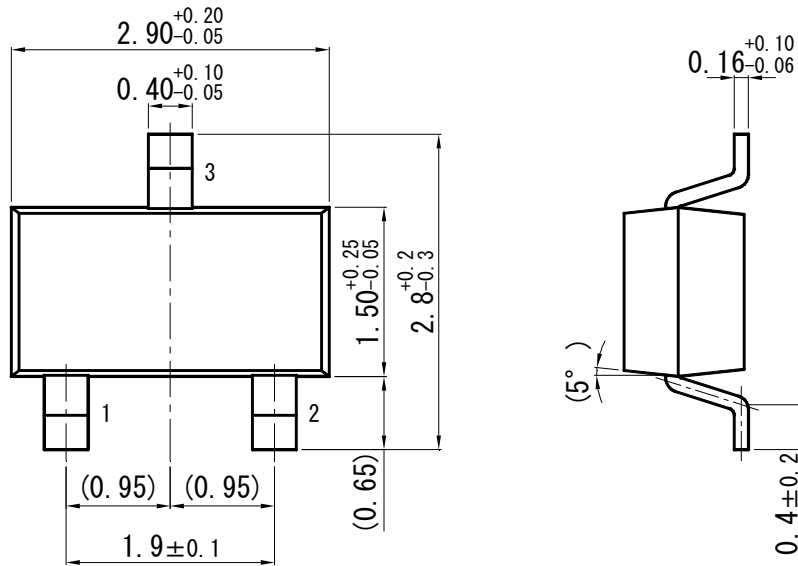


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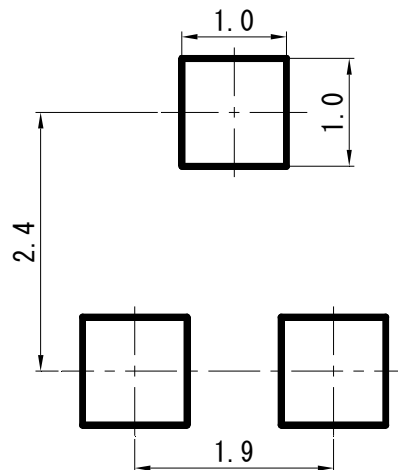


Mini3-G3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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