



Zener Diode
DZ3S100D0L

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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: 04

■ Packaging

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

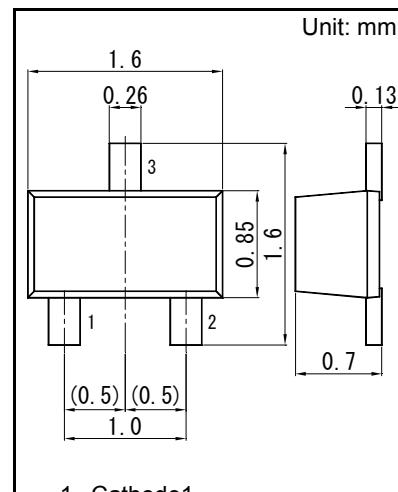
■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Total power dissipation ^{*1}	PT	150	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 (0.6 mm x 0.6 mm)

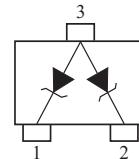
*2: Test method:IEC61000_4_2(C = 150 pF, R = 330 Ω, Contact discharge:10 times)



1. Cathode1
2. Cathode2
3. Anode1,2

Panasonic	SSMini3-F3-B
JEITA	SC-89
Code	SOT-490

Internal Connection



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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	VF	IF = 10 mA			1.0	V
Zener voltage ^{*1, *2}	VZ	$I_Z = 5 \text{ mA}$	9.50		10.50	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	$VR = 7 \text{ V}$			0.05	μA
Temperature coefficient of zener voltage ^{*3}	SZ	$I_Z = 5 \text{ mA}$	6.5			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 guaranteed 20 ms after current flow.

*3: $T_j = 25^\circ\text{C}$ to 150°C

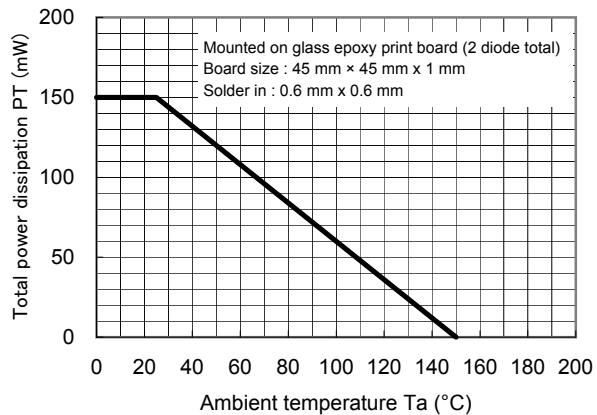
Panasonic

Zener Diode

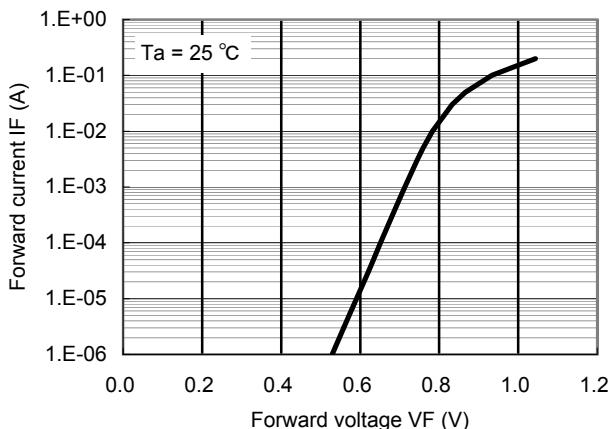
DZ3S100D0L

Technical Data (reference)

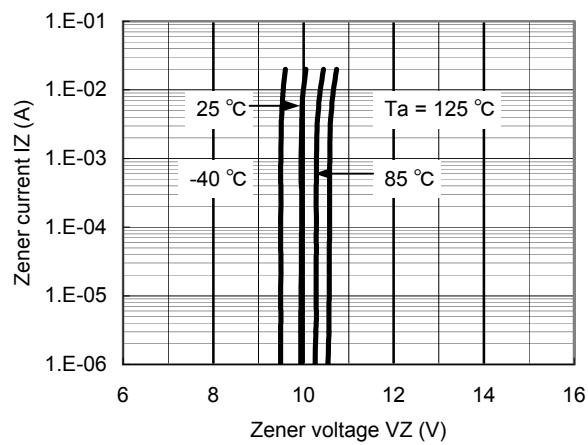
PT - Ta



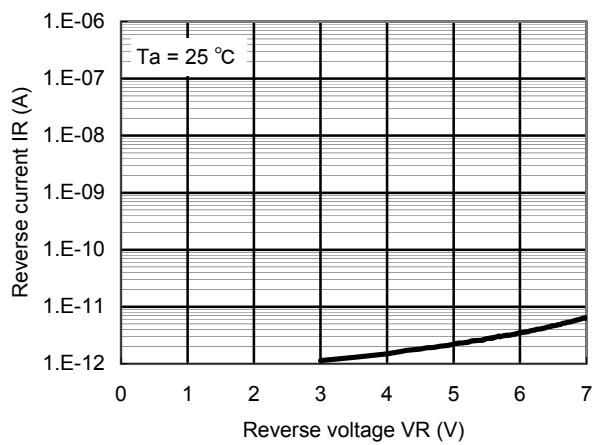
IF - VF



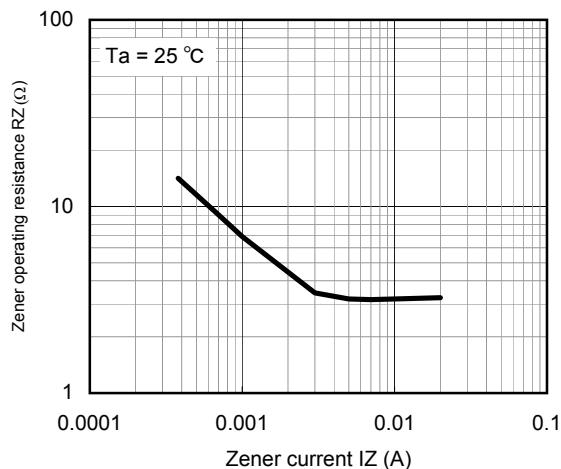
IZ - VZ



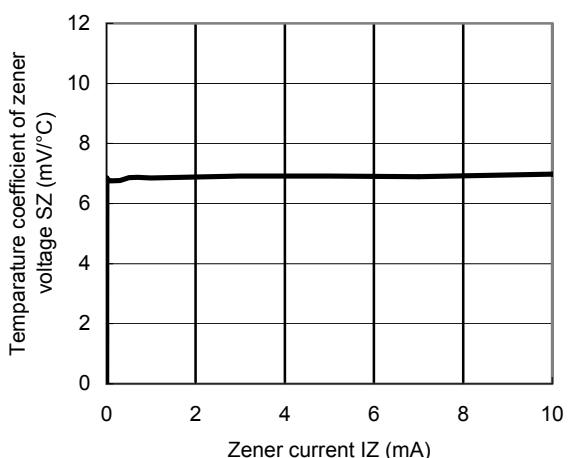
IR - VR



RZ-IZ



SZ - IZ



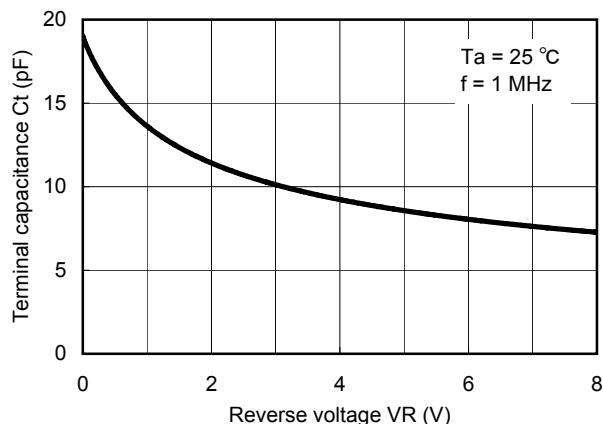
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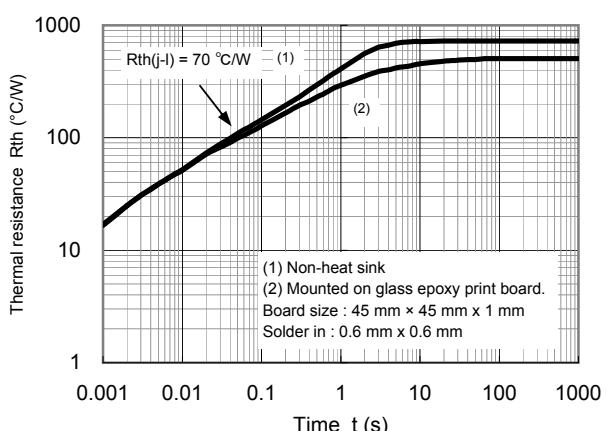
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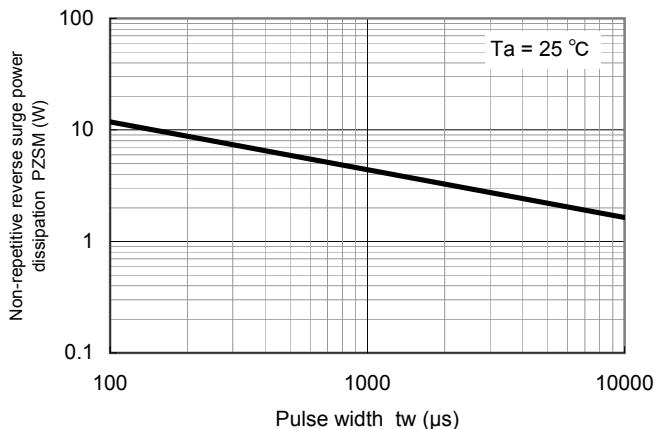
Ct - VR



Rth - t



PZSM - tw



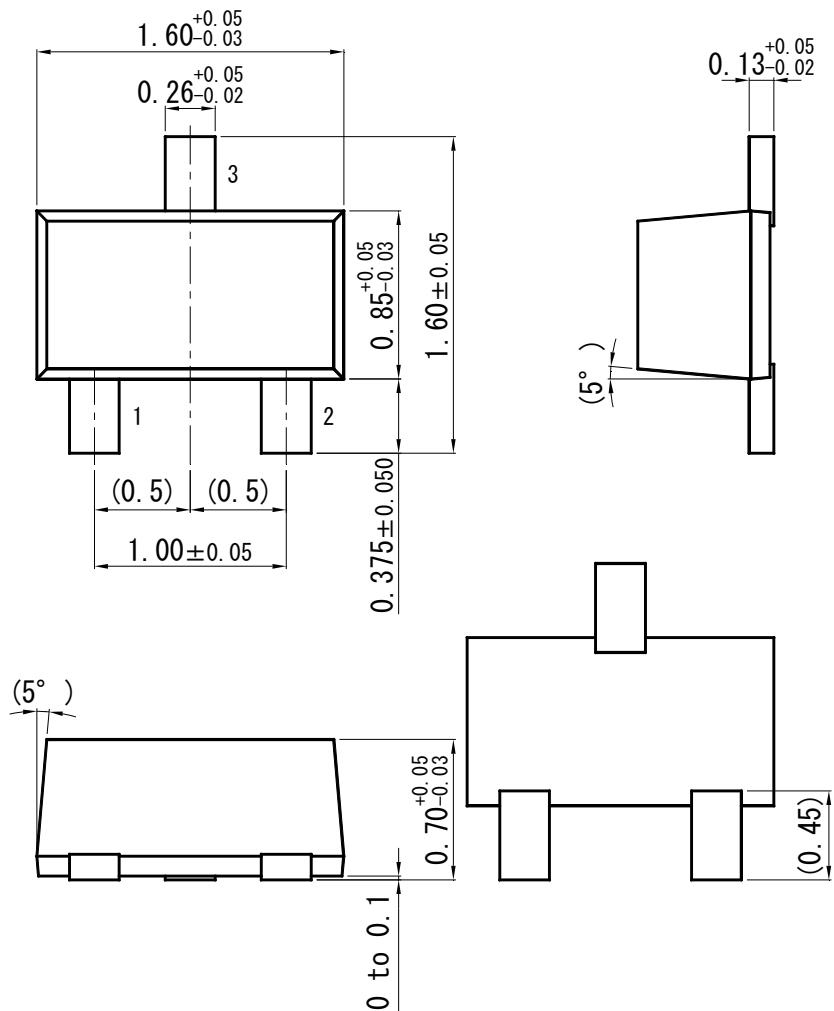
Panasonic

Zener Diode

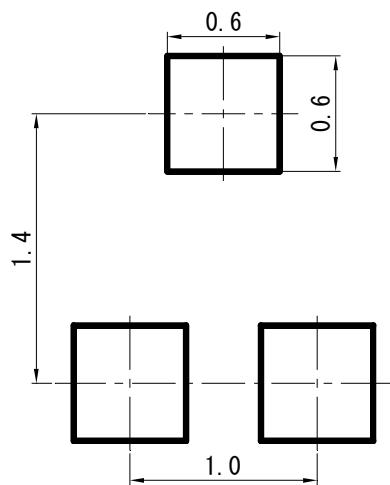
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SSMini3-F3-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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