

**Panasonic**

Zener Diode  
**DZ2S330×0L**

**DZ2S330×0L**  
Silicon epitaxial planar type

For constant voltage / For surge absorption circuit  
DZ2J330 in SSMini2 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: HG or HR

■ Packaging

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

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

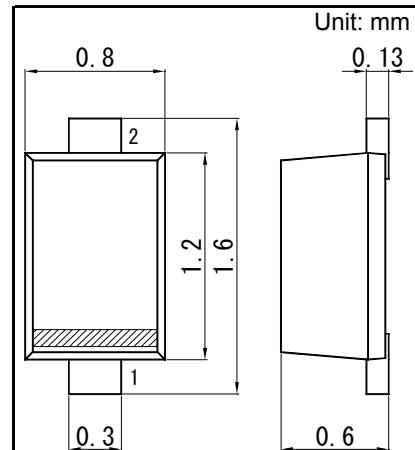
Parameter	Symbol	Rating	Unit
Repetitive peak forward current	IFRM	200	mA
Total power dissipation <sup>*1</sup>	PT	150	mW
Electrostatic discharge <sup>*2</sup>	ESD	$\pm 8$	kV
Junction temperature	T <sub>j</sub>	150	°C
Operating ambient temperature	T <sub>opr</sub>	-40 to +85	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

Note) \*1 Mounted on glass epoxy print board ( 45 mm × 45 mm × 1 mm )

Solder in ( 0.8 mm × 0.6 mm )

\*2 Test method : IEC61000\_4\_2

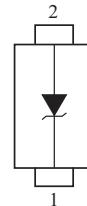
(  $C = 150 \text{ pF}$ ,  $R = 330 \Omega$ , Contact discharge : 10 times )



1. Cathode
2. Anode

Panasonic	SSMini2-F5-B
JEITA	SC-79
Code	SOD-523

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 <sup>*1, *2</sup>	VZ	$I_Z = 2 \text{ mA}$	31.35		34.65	V
Zener operating resistance	RZ	$I_Z = 2 \text{ mA}$			200	Ω
Zener rise operating resistance	RZK	$I_Z = 0.5 \text{ mA}$			200	Ω
Reverse current	IR	$VR = 25 \text{ V}$			0.05	μA
Temperature coefficient of zener voltage <sup>*3</sup>	SZ	$I_Z = 2 \text{ mA}$			32.0	mV/°C

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

2. Absolute frequency of input and output is 5 MHz.

3. \*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  $150^\circ\text{C}$

Rank classification

Code	M	0
Rank	M	No-rank
VZ	32.20 to 33.80	31.35 to 34.65
Marking symbol	HR	HG

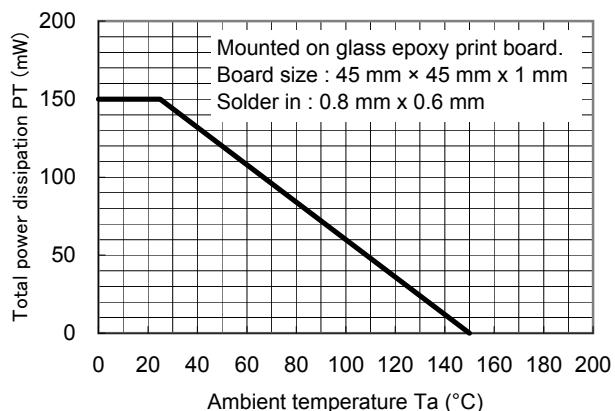


Zener Diode

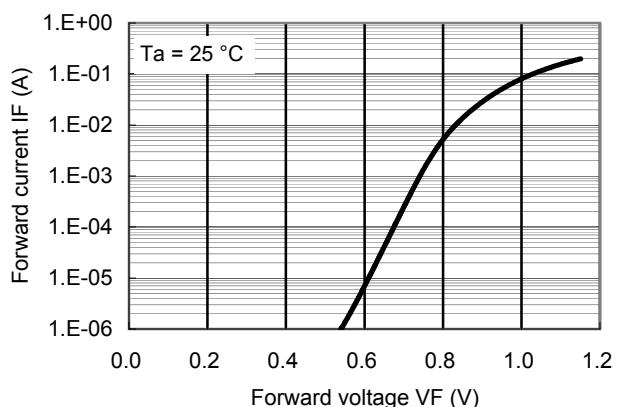
DZ2S330x0L

### Technical Data ( reference )

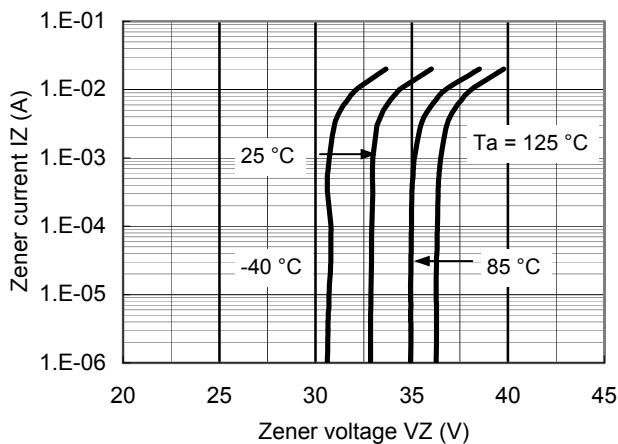
PT - Ta



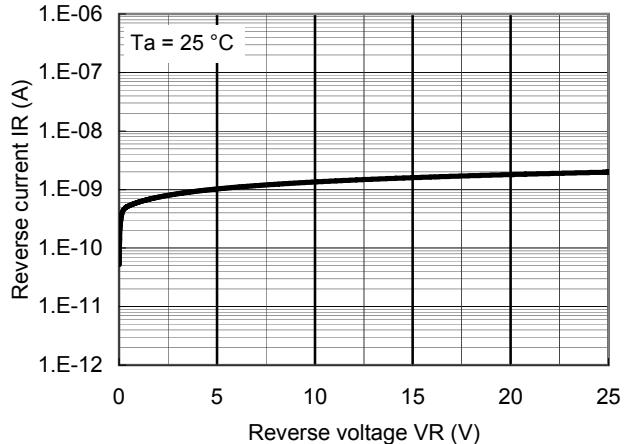
IF - VF



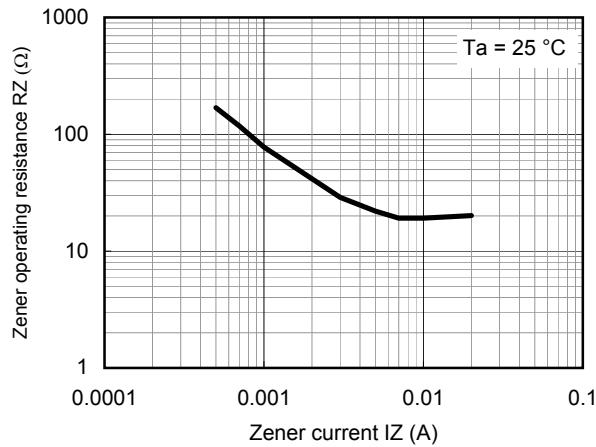
IZ - VZ



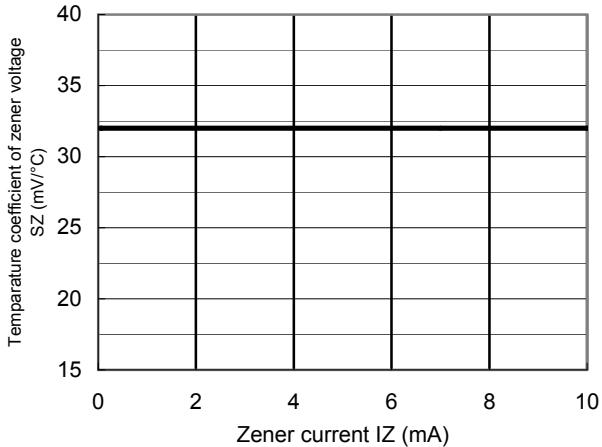
IR - VR



RZ - IZ



SZ - IZ



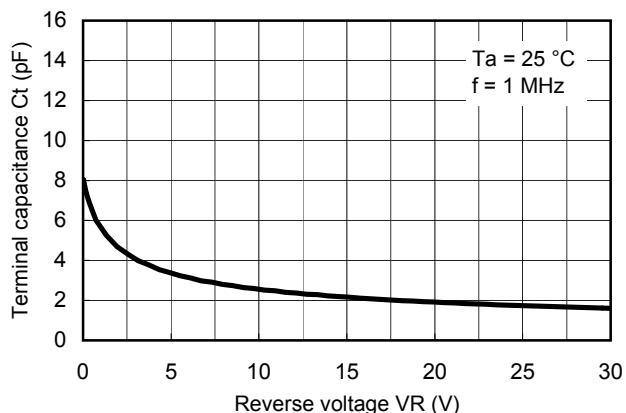
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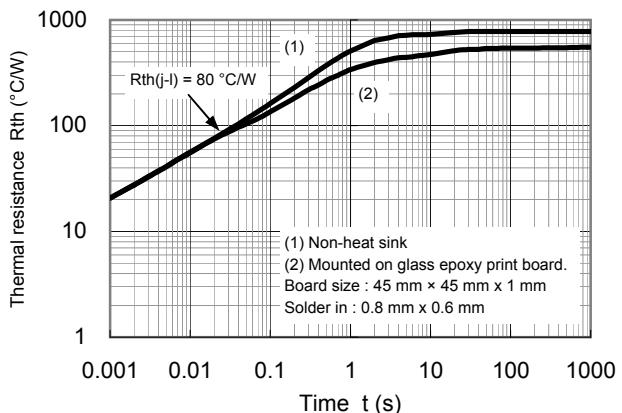
**DZ2S330x0L**

Technical Data ( reference )

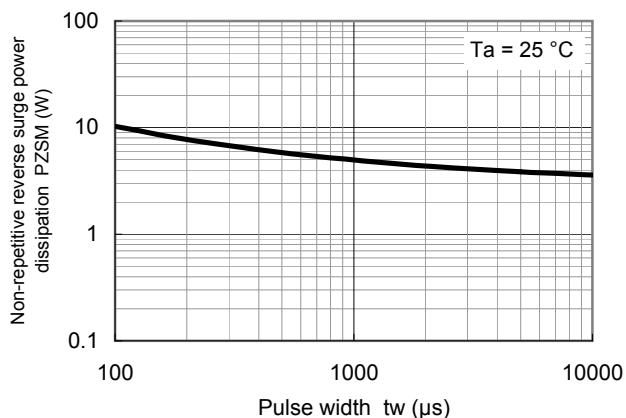
Ct - VR



Rth - t



PZSM - tw

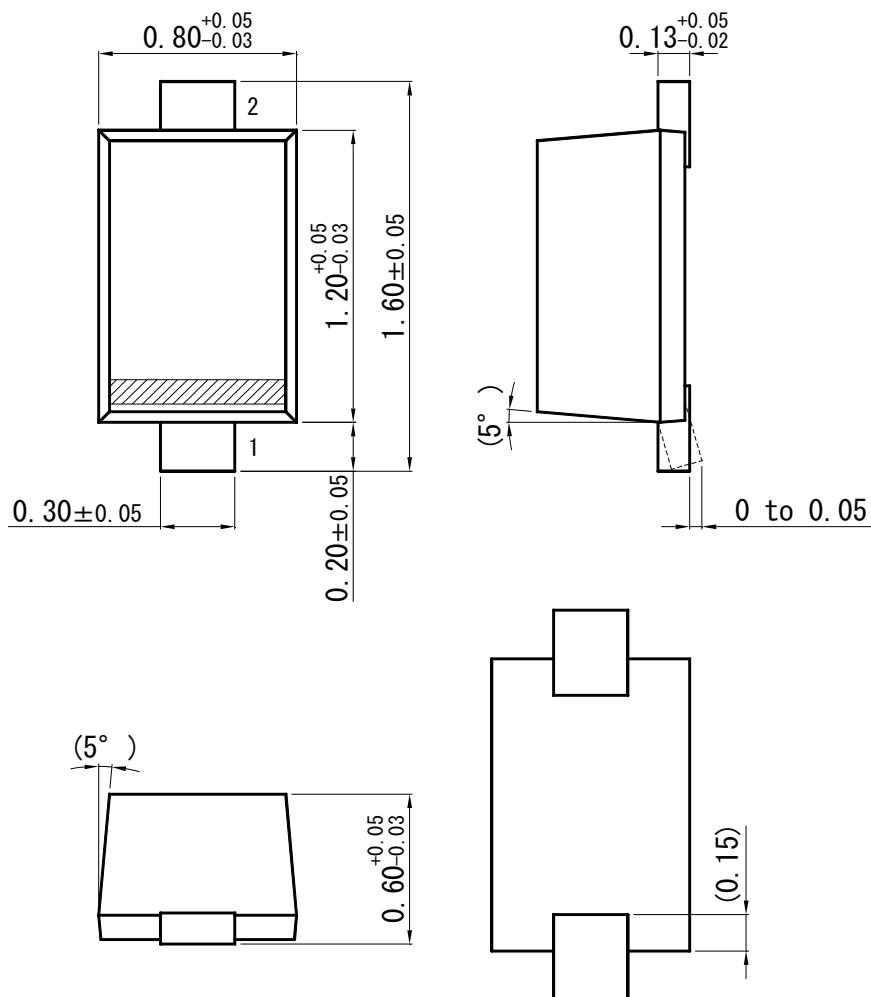


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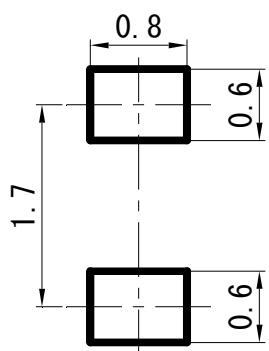
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**DZ2S330×0L**

**SSMini2-F5-B**

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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