



Zener Diode
DZ2S200×0L

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Silicon epitaxial planar type

For constant voltage / For surge absorption circuit
DZ2J200 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: ZJ or ZU

■ Packaging

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

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

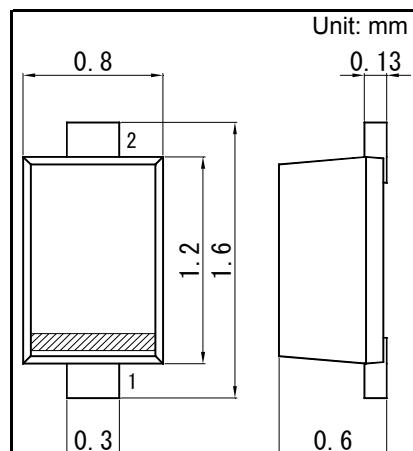
Parameter	Symbol	Rating	Unit
Repetitive peak forward current	IFRM	200	mA
Total power dissipation ^{*1}	PT	150	mW
Electrostatic discharge ^{*2}	ESD	± 8	kV
Junction temperature	T _j	150	°C
Operating ambient temperature	T _{opr}	-40 to +85	°C
Storage temperature	T _{stg}	-55 to +150	°C

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

Solder in (0.8 mm × 0.6 mm)

*2 Test method : IEC61000_4_2

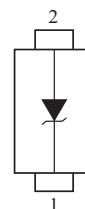
($C = 150 \text{ pF}$, $R = 330 \Omega$, Contact discharge : 10 times)



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 ^{*1, *2}	V _Z	$I_Z = 5 \text{ mA}$	19.00		21.00	V
Zener operating resistance	R _Z	$I_Z = 5 \text{ mA}$			80	Ω
Zener rise operating resistance	R _{ZK}	$I_Z = 0.5 \text{ mA}$			100	Ω
Reverse current	I _R	$V_R = 15 \text{ V}$			0.05	μA
Temperature coefficient of zener voltage ^{*3}	S _Z	$I_Z = 5 \text{ mA}$		18.4		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°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 $T_j = 25^\circ\text{C}$ to 150°C

Rank classification

Code	M	0
Rank	M	No-rank
V _Z	19.50 to 20.50	19.00 to 21.00
Marking symbol	ZU	ZJ

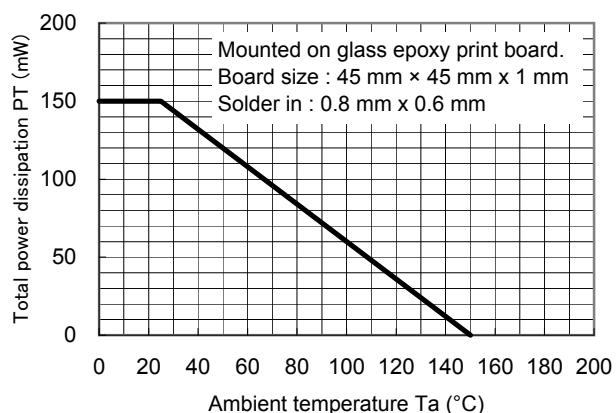


Zener Diode

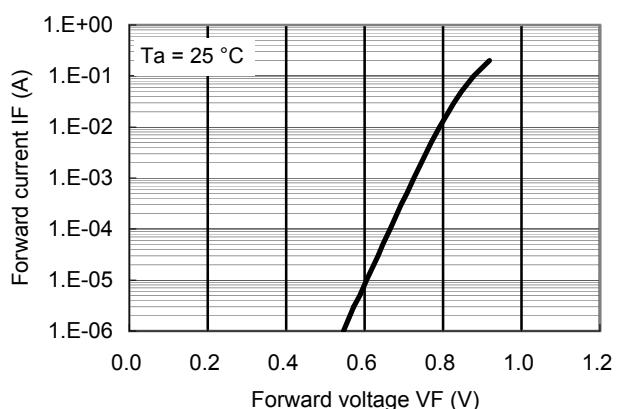
DZ2S200x0L

Technical Data (reference)

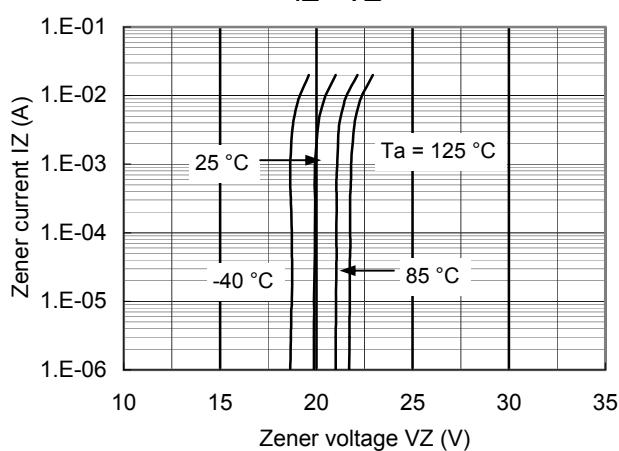
PT - Ta



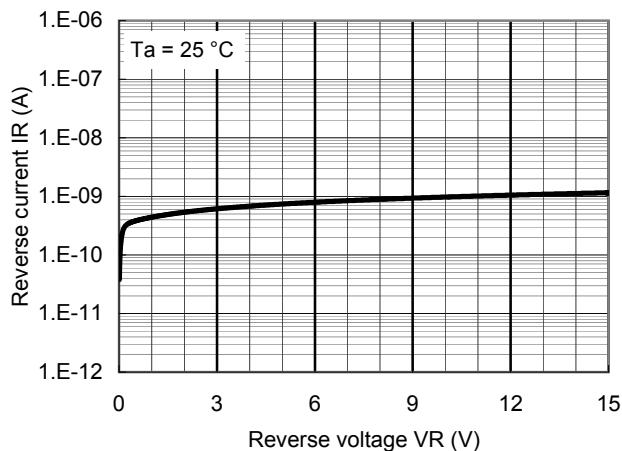
IF - VF



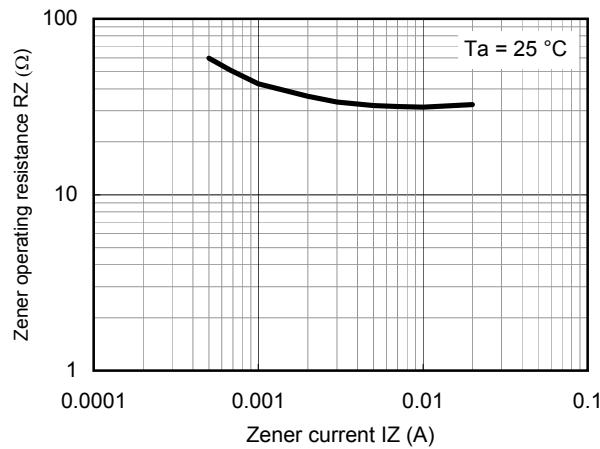
IZ - VZ



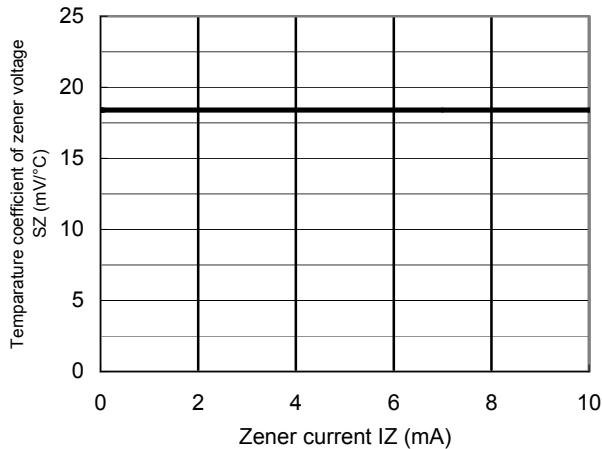
IR - VR



RZ - IZ



SZ - IZ



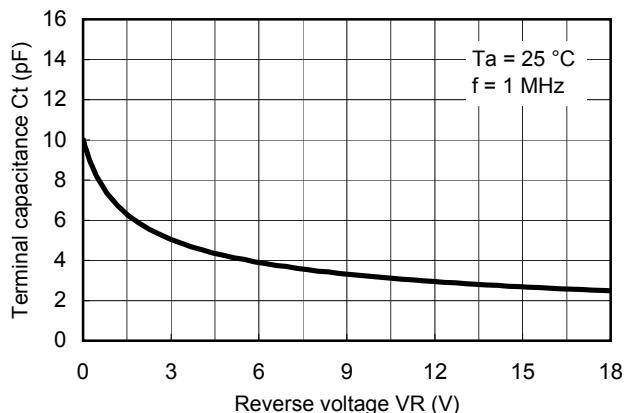


Zener Diode

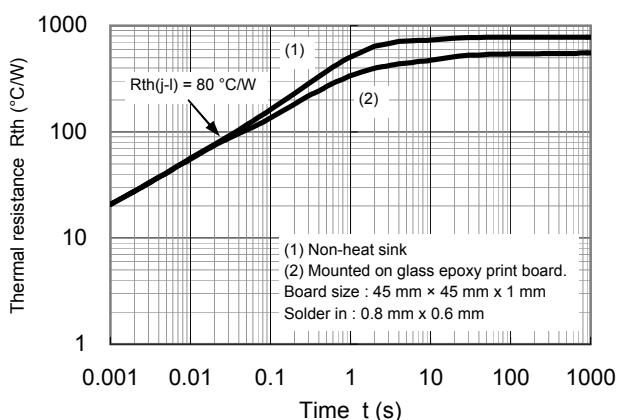
DZ2S200×0L

Technical Data (reference)

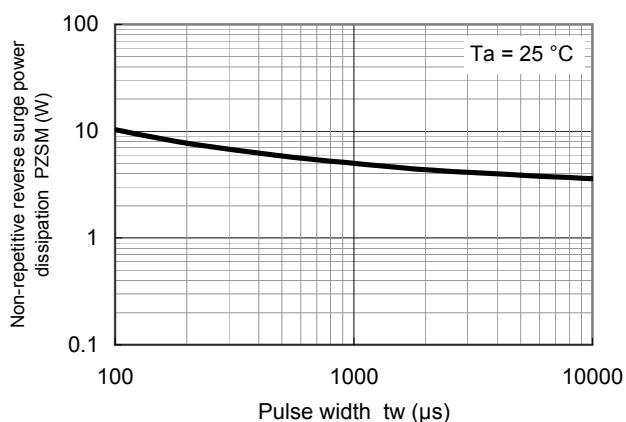
Ct - VR



Rth - t



PZSM - tw

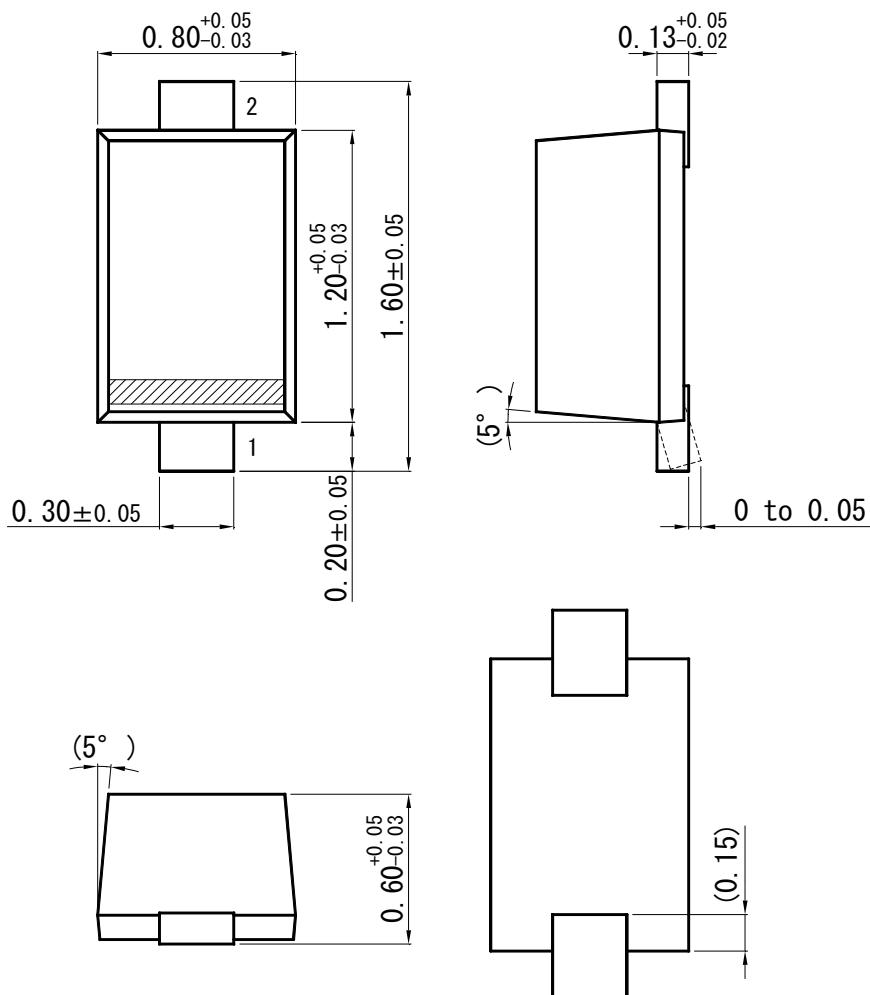


Panasonic

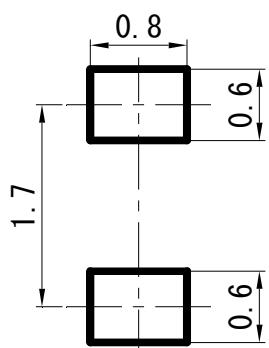
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SSMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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