



Zener Diode
DZ2S180C0L

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Silicon epitaxial planar type

For ESD protection
Bi-directional type

■ Features

- High ESD
- Low terminal capacitance Ct
- Halogen-free / RoHS compliant
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

■ Marking Symbol: YH

■ Packaging

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

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

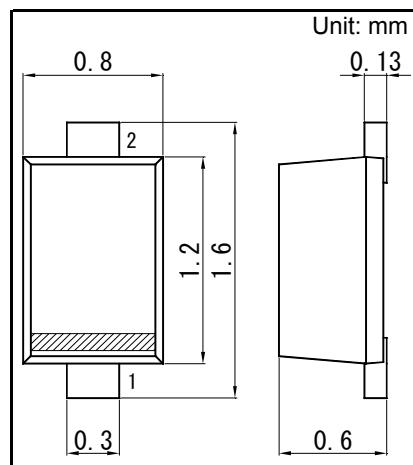
Parameter	Symbol	Rating	Unit
Total power dissipation ^{*1}	PT	150	mW
Electrostatic discharge ^{*2}	ESD	± 15	kV
Junction temperature	T _j	150	°C
Operating ambient temperature	T _{opr}	-40 to +85	°C
Storage temperature	T _{stg}	-55 to +150	°C

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

Solder in (0.8 mm \times 0.6 mm)

*2 Test method : IEC61000_4_2

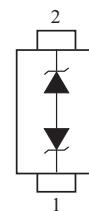
(C = 150 pF, R = 330 Ω, Contact discharge : 10 times)



1. Cathode
2. Cathode

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
Zener voltage ^{*1, *2}	V _Z	I _Z = 5 mA	17.5		20.0	V
Zener operating resistance	R _Z	I _Z = 5 mA			60	Ω
Reverse current	I _R	V _R = 13 V			15	nA
Terminal capacitance	C _t	V _R = 0 V, f = 1 MHz		5		pF
Temperature coefficient of zener voltage ^{*3}	S _Z	I _Z = 5 mA		14		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

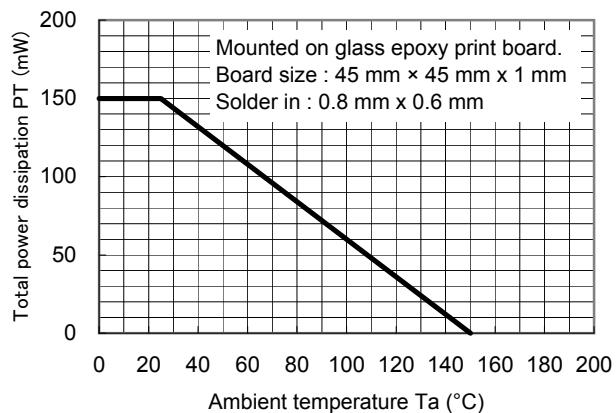


Zener Diode

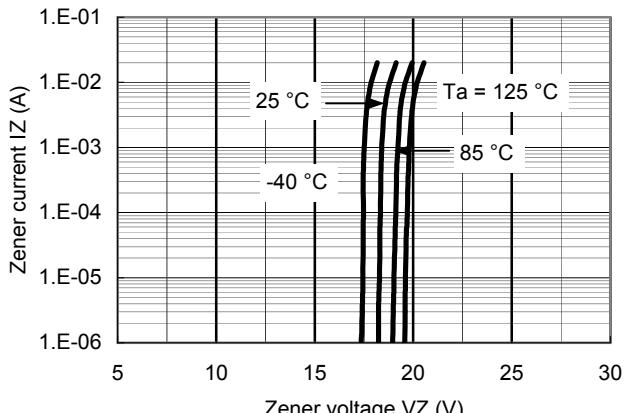
DZ2S180C0L

Technical Data (reference)

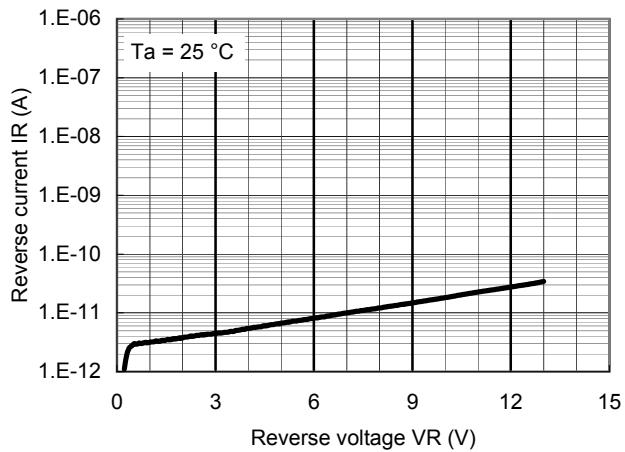
PT - Ta



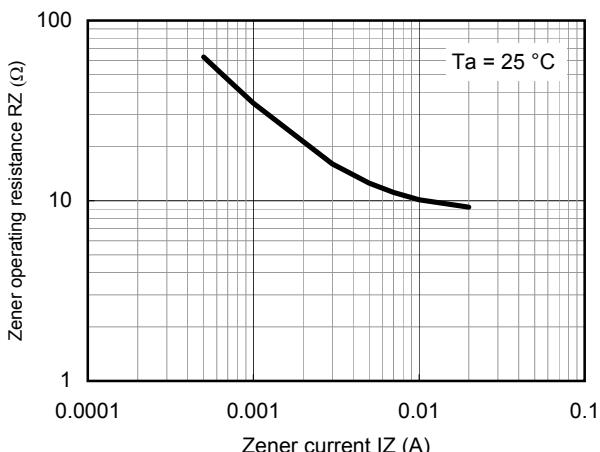
IZ - VZ



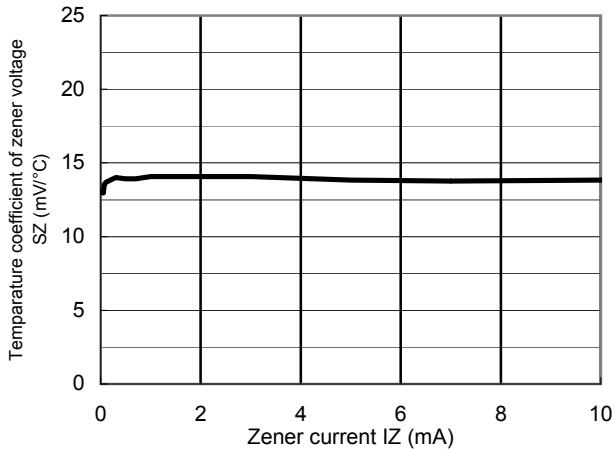
IR - VR



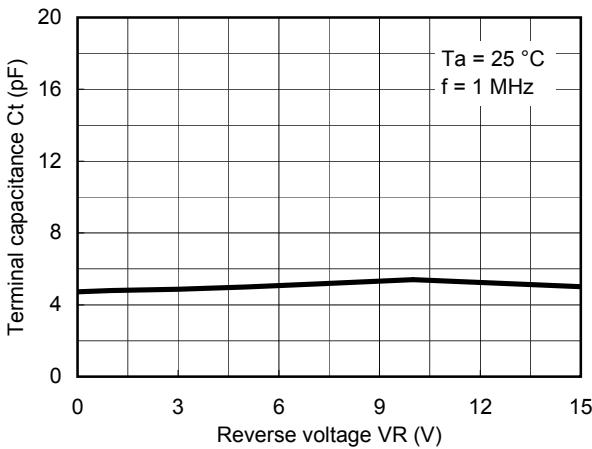
RZ - IZ



SZ - IZ



Ct - VR

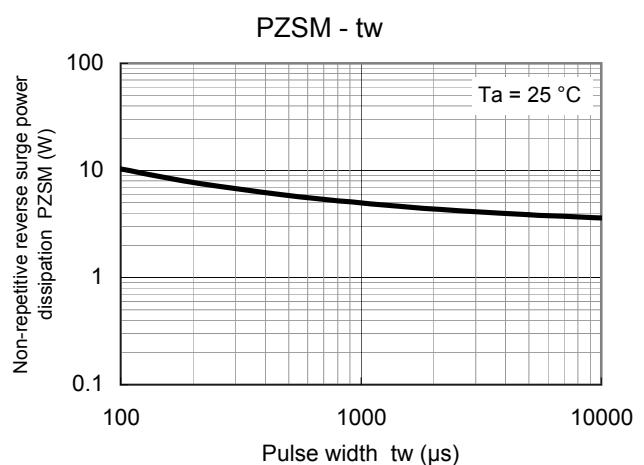
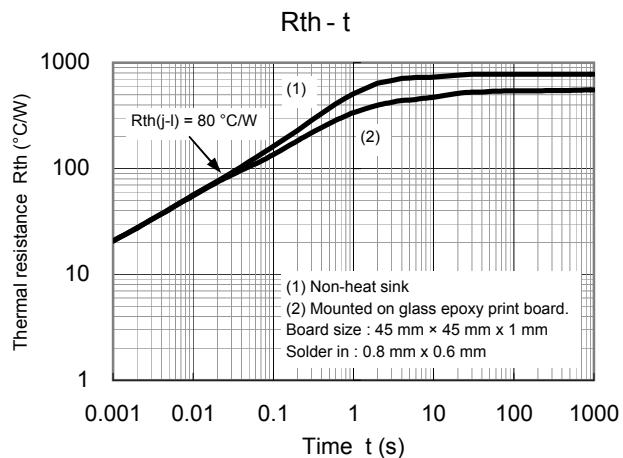




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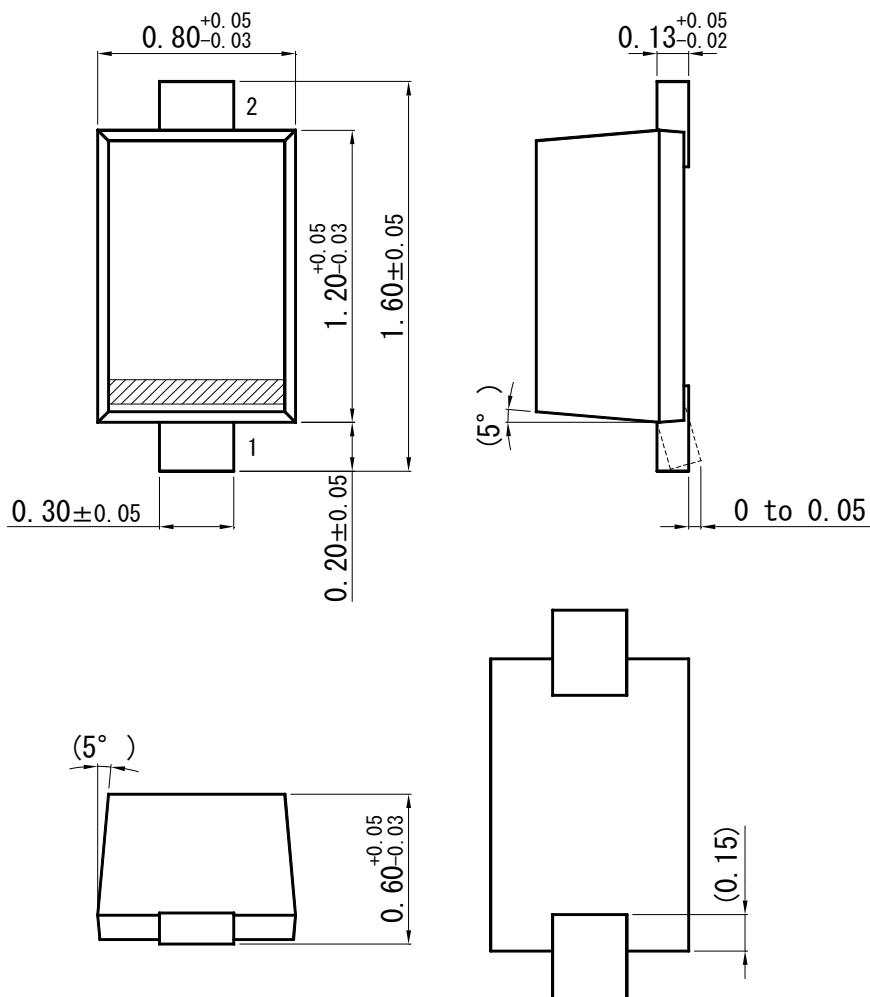


Panasonic

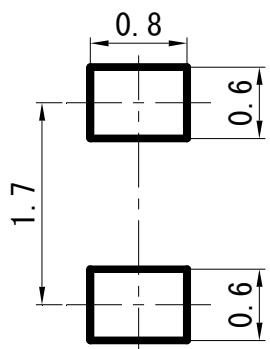
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SSMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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