Zener Diode

Panasonic DZ2S180C0L

DZ2S180C0L

Silicon epitaxial planar type

For ESD protection
Bi-directional type

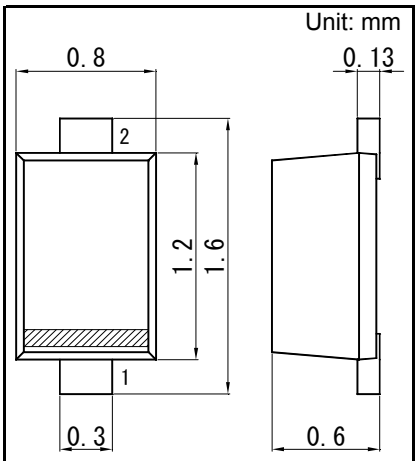
■ Features

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

■ Marking Symbol: YH

■ Packaging

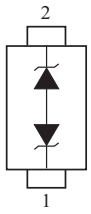
Embossed type (Thermo-compression sealing) : 3 000 pcs / reel (standard)



1. Cathode
2. Cathode

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

Internal Connection



■ Absolute Maximum Ratings Ta = 25 °C

Parameter	Symbol	Rating	Unit
Total power dissipation *1	PT	150	mW
Electrostatic discharge *2	ESD	±15	kV
Junction temperature	Tj	150	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-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 pF, R = 330 Ω, Contact discharge : 10 times)

■ Electrical Characteristics Ta = 25 °C ± 3 °C

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Zener voltage *1, *2	VZ	IZ = 5 mA	17.5		20.0	V
Zener operating resistance	RZ	IZ = 5 mA			60	Ω
Reverse current	IR	VR = 13 V			15	nA
Terminal capacitance	Ct	VR = 0 V, f = 1 MHz		5		pF
Temperature coefficient of zener voltage *3	SZ	IZ = 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 VZ mesurement.
VZ value measured at other temperature must be adjusted to VZ (25 °C).
*2 VZ guaranted 20 ms after current flow
*3 Tj = 25 °C to 150 °C

Established : 2010-05-27
Revised : 2013-07-24

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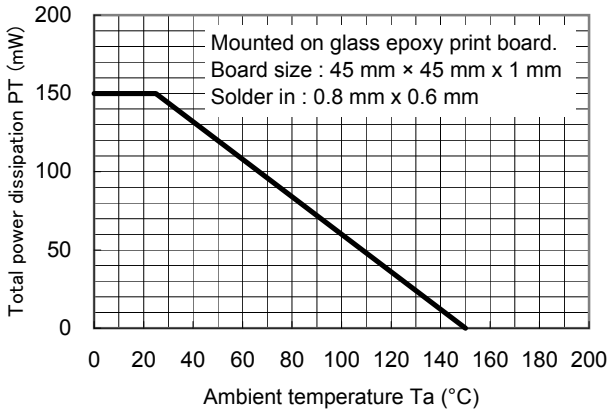
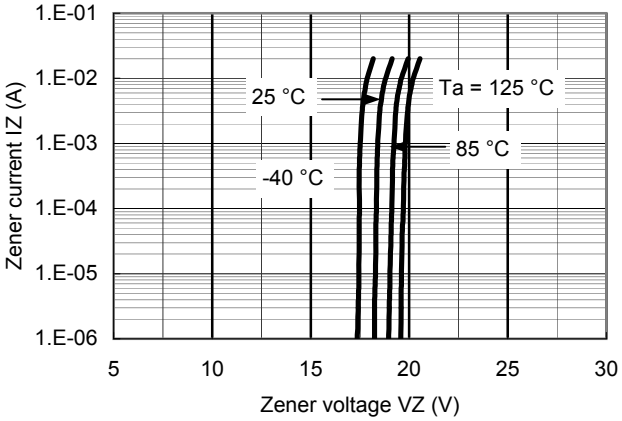
Technical Data (reference)

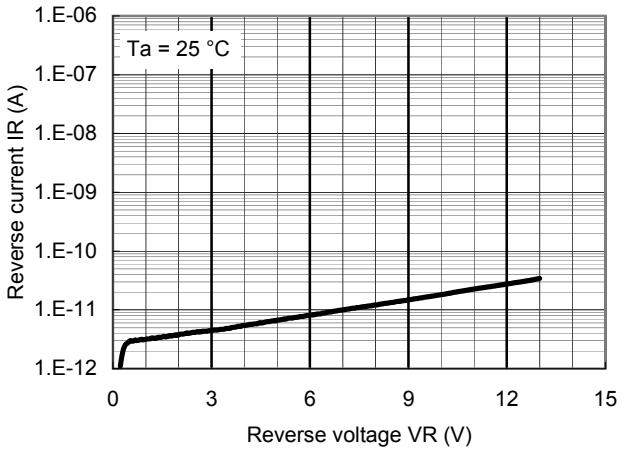
PT - Ta



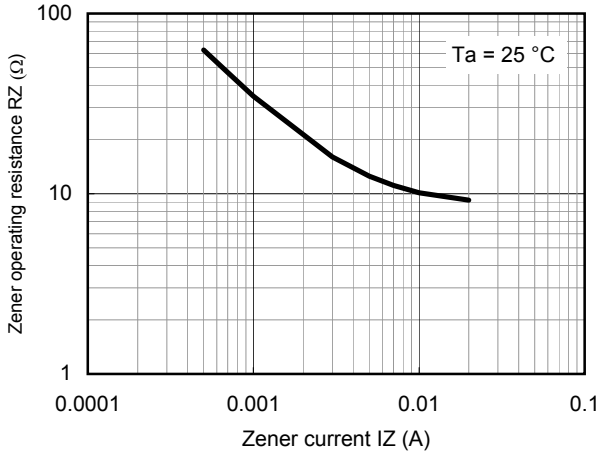
IZ - VZ



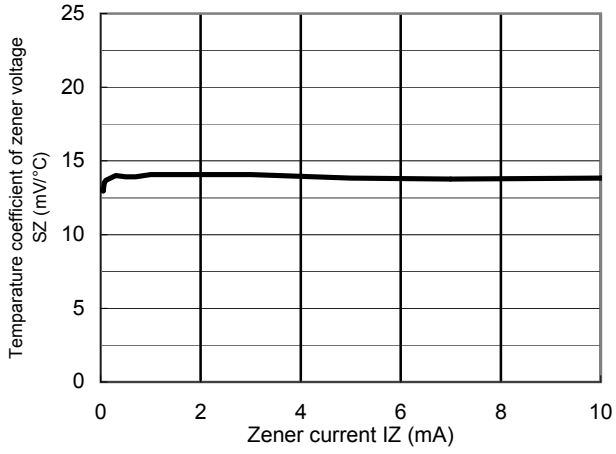
IR - VR



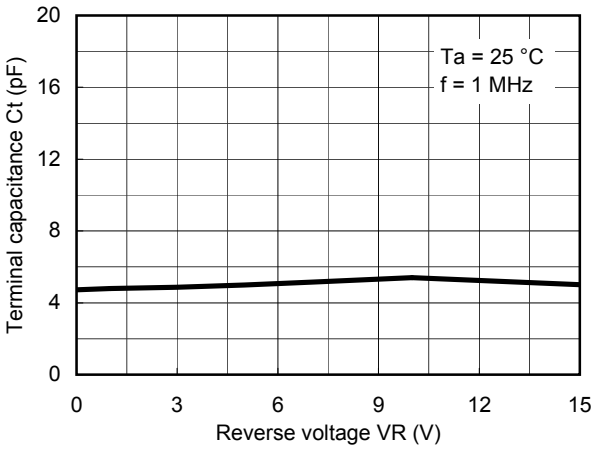
RZ - IZ



SZ - IZ



Ct - VR



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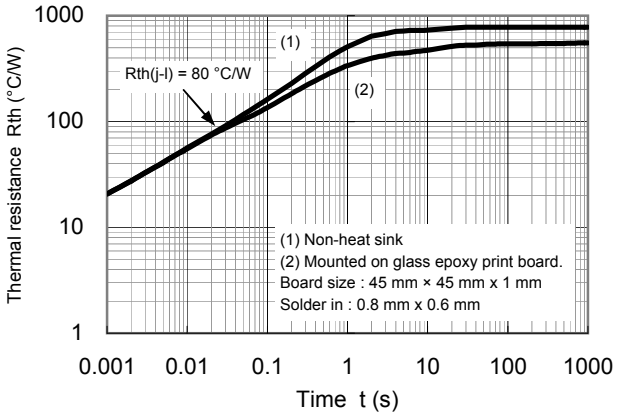
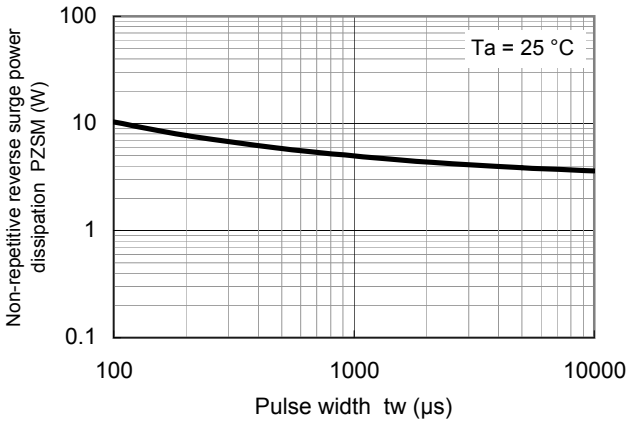
Technical Data (reference)

Rth - t



PZSM - tw



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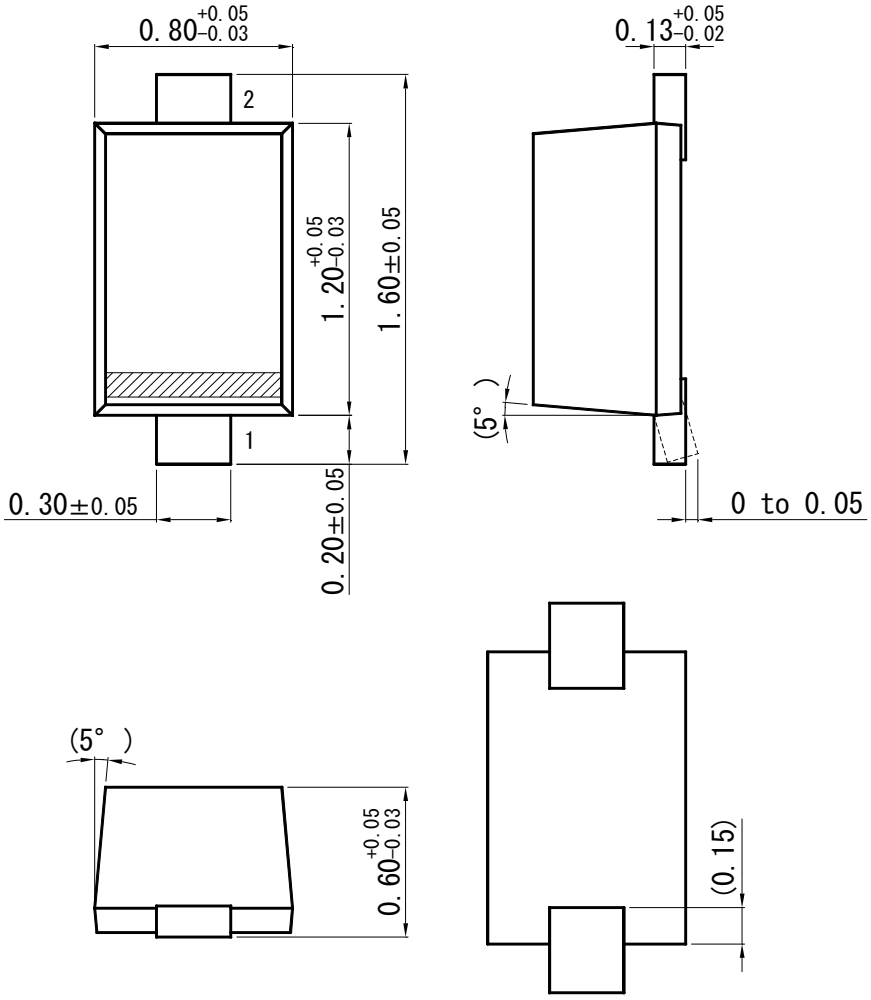
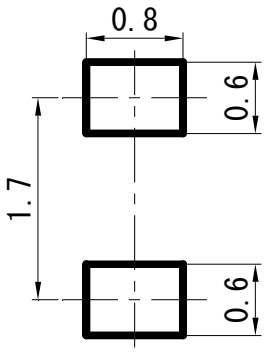
SSMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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