

Zener Diode DE2S05100L

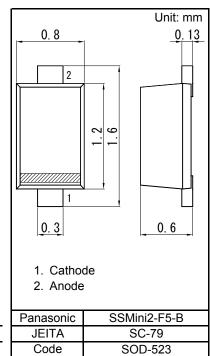
DE2S05100L Silicon epitaxial planar type

For ESD protection

- Features
- High ESD
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol CC

Packaging

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



Internal Connection	

Absolute Maximum Ratings Ta = 25	°C		
Parameter	Symbol	Rating	Unit
Total power dissipation ^{*1}	PT	150	mW
Electrostatic discharge *2	ESD	±30	kV
Junction temperature	Tj	150	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-55 to +150	°C

Tstg -55 to +150 Note) *1: Mounted on glass epoxy print board. (45 mm x 45 mm x 1 mm) Solder in (0.8 mm x 0.6 mm)

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

Electrical Characteristics	Ta = 25 °C \pm 3 °C
Deremeter	Cumphia

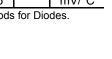
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Zener voltage *1,*2	VZ	IZ = 1 mA	4.85		5.36	V
Reverse current	IR	VR = 2 V			1.0	μA
Terminal capacitance	Ct	VR = 0 V, f = 1 MHz		75		pF
Temperature coefficient of zener voltage *3	SZ	IZ = 1 mA		0.6		mV/°C

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.

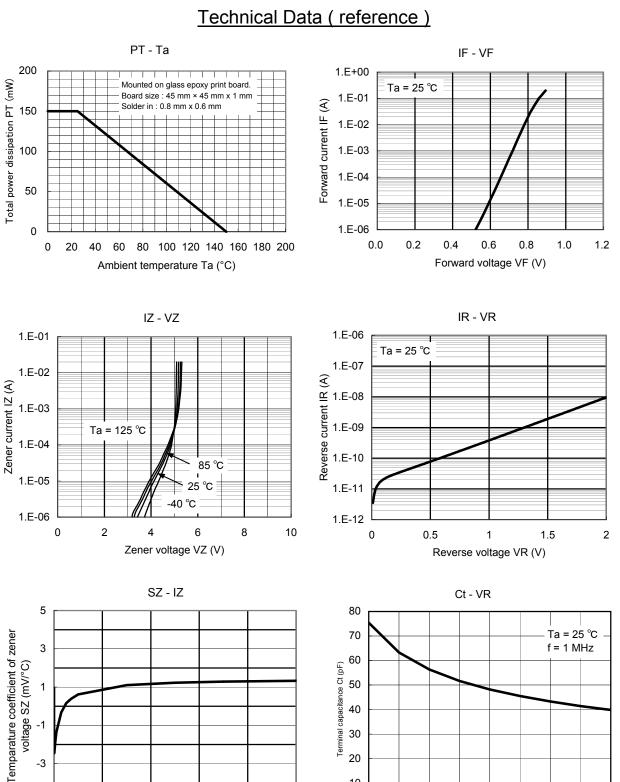
- VZ value measured at other temperature must be adjusted to VZ (25°C)
- *2: VZ guaranted 20 ms after current flow.

*3: Tj = 25°C to 150°C





Zener Diode DE2S05100L



20

10

0

0

1

4

3

2

Reverse voltage VR (V)

Established : 2012-10-24 : 2013-11-01 Revised

-3

-5

0

2

4

6

Zener current IZ (mA)

8

10

Panasonic DE2S05100L Technical Data (reference) Rth - t PZSM - tw 1000 1000 (1) Ta = 25 °C Non-repetitive reverse surge power dissipation PZSM (W) Thermal resistance Rth (°C/W) Rth(j-l) = 80 °C/W (2) 100 100 10 10 (1) Non-heat sink 1 (2) Mounted on glass epoxy print board. Board size : 45 mm × 45 mm x 1 mm Solder in : 0.8 mm x 0.6 mm 1 0.1 0.01 100 1000 0.001 0.1 1 10 100 1000 10000 Time t (s) Pulse width tw (µs)

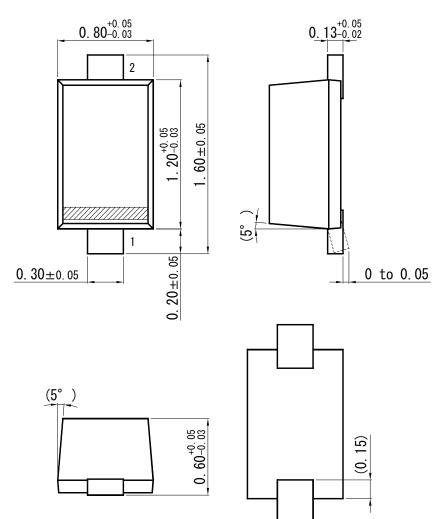
Zener Diode



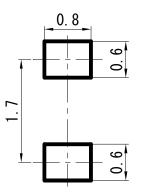
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SSMini2-F5-B

Unit: mm



Land Pattern (Reference) (Unit: mm)



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