Revision. 3

Zener Diode

DZ2S091×0L

Panasonic

DZ2S091×0L

Silicon epitaxial planar type

For constant voltage / For surge absorption circuit DZ2J091 in SSMini2 type package

■ Features

- · Excellent rising characteristics of zener current Iz
- · Low zener operating resistance Rz
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)
- Marking Symbol: LJ or LU

■ Packaging

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

■ Absolute Maximum Ratings Ta = 25 °C

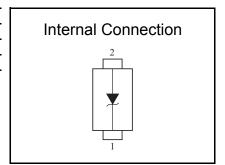
Parameter	Parameter Symbol Rating		Unit
Repetitive peak forward current	IFRM	200	mA
Total power dissipation *1	PT	150	mW
Electrostatic discharge *2	ESD	±8	kV
Junction temperature	Tj	150	°C
Operating ambient temperature	Topr	-40 to +85	°C
Storage temperature	Tstg	-55 to +150	°C

Note) *1 Mounted on glass epoxy print board ($45 \text{ mm} \times 45 \text{ mm} \times 1 \text{ mm}$) Solder in ($0.8 \text{ mm} \times 0.6 \text{ mm}$)

*2 Test method : IEC61000_4_2

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

Unit: mm 0.8 0.13 2 0.6 1. Cathode 2. Anode Panasonic SSMini2-F5-B JEITA SC-79 Code SOD-523



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

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Forward voltage	VF	IF = 10 mA			1.0	V
Zener voltage *1, *2	VZ	IZ = 5 mA	8.65		9.56	V
Zener operating resistance	RZ	IZ = 5 mA			20	Ω
Zener rise operating resistance	RZK	IZ = 0.5 mA			60	Ω
Reverse current	IR	VR = 6 V			0.1	μΑ
Temperature coefficient of zener voltage *3	SZ	IZ = 5 mA		5.8		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 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: 2009-11-10

: 2013-07-23

Revised

Rank classification

Code	M			0		
Rank	M		No-rank			
VZ	8.87	to	9.33	8.65	to	9.56
Marking symbol	LU		LJ			

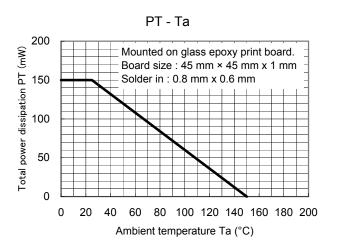
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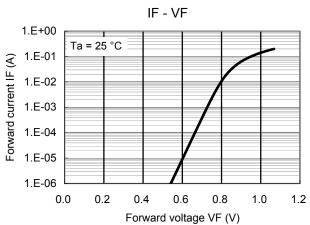
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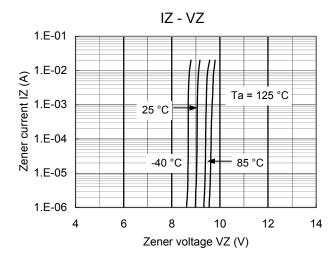
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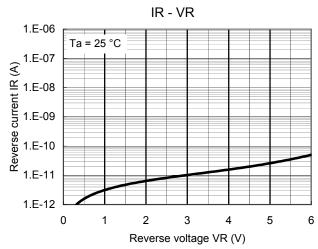
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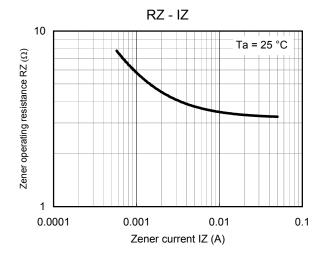
Technical Data (reference)

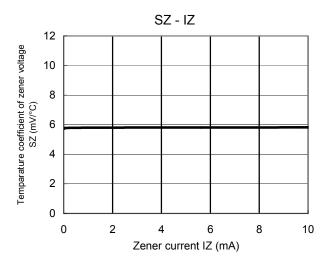










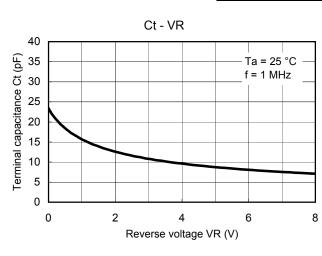


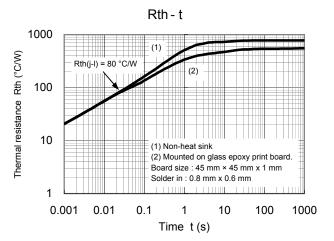
Established: 2009-11-10 Revised: 2013-07-23 **Panasonic**

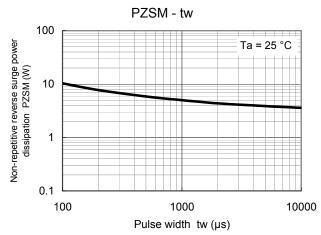
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Technical Data (reference)







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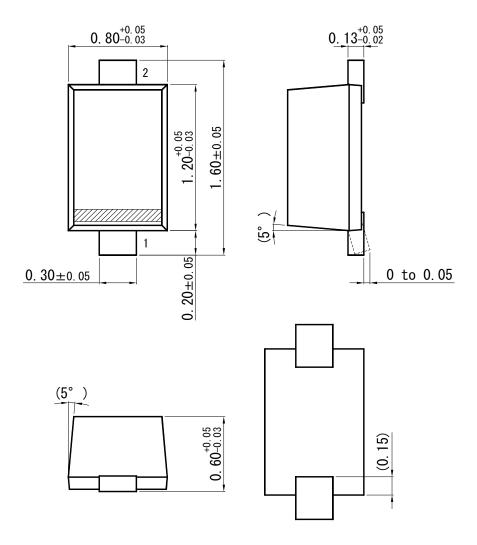
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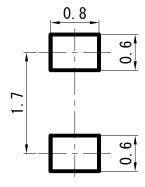
SSMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)

Established: 2009-11-10 Revised: 2013-07-23



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