# Panasonic

Zener Diode DZ2S091×0L

### 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	Symbol	Rating	Unit				
	Repetitive peak forward current	IFRM	200	mA				
	Total power dissipation <sup>*1</sup>	PT	150	mW				
	Electrostatic discharge *2	ESD	±8	kV				
	Junction temperature	Tj	150	°C				
	Operating ambient temperature	Topr	-40 to +85	С°				
	Storage temperature	Tota	55 to ±150	00				

 
 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 )
 Solder in ( 0.8 mm × 0.6 mm )

\*2 Test method : IEC61000\_4\_2

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

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

Electrical Characteristics Ta - 25 C ± 5 C								
Parameter	Symbol	Conditions	Min	Тур	Max	Unit		
Forward voltage	VF	IF = 10 mA			1.0	V		
Zener voltage <sup>*1, *2</sup>	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	μA		
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.

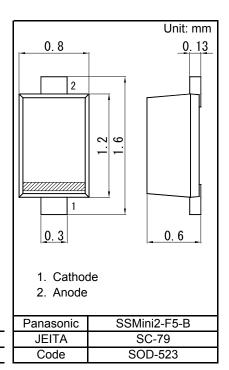
3. \*1 The temperature must be controlled 25 °C for VZ mesurement.

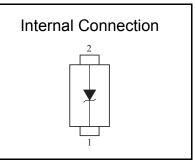
VZ value measured at other temperature must be adjusted to VZ (25 °C).

\*2 VZ guaranted 20 ms after current flow Rank classification

\*3 Tj = 25 °C to 150 °C

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

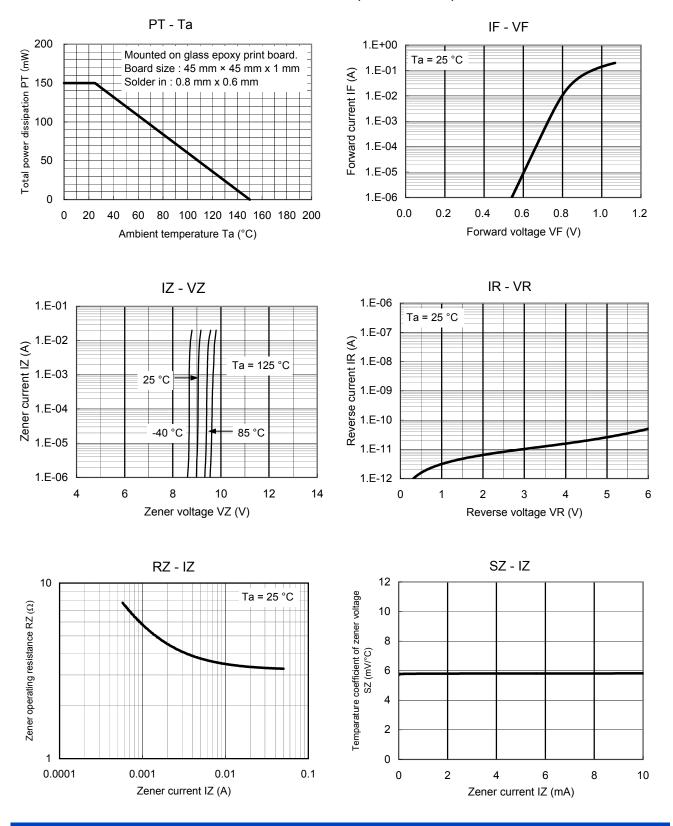






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### Technical Data (reference)



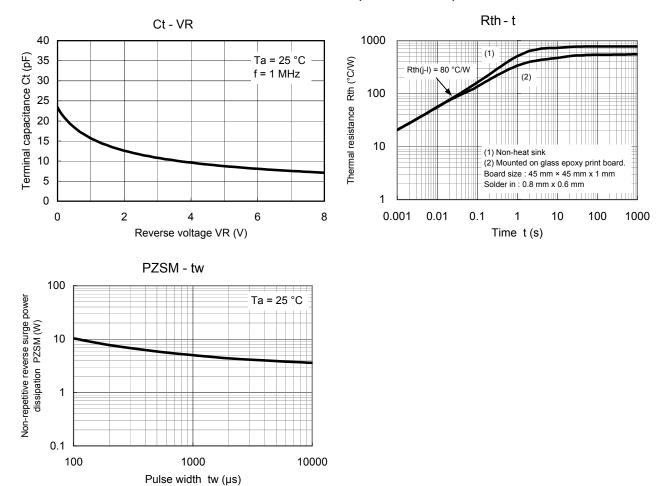
Established : 2009-11-10 Revised : 2013-07-23

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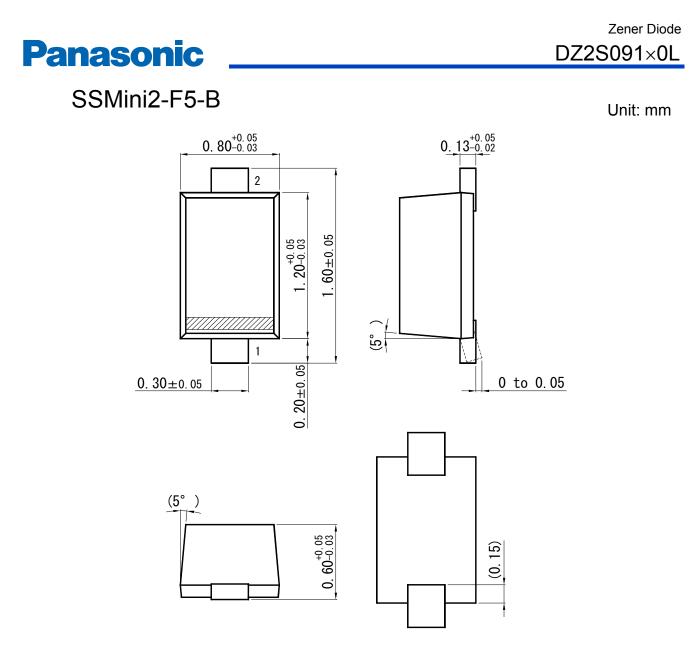


 $\begin{array}{c} \text{Zener Diode} \\ DZ2S091{\times}0L \end{array}$ 

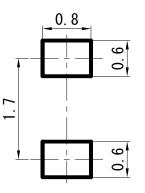
Technical Data (reference)



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Land Pattern (Reference) (Unit: mm)



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