## Panasonic

## DZ2709100L

## Silicon epitaxial planar type

## For constant voltage / For surge absorption circuit DZ2S091 in SSSMini2 type package

## - Features

- Excellent rising characteristics of zener current lz
- Low zener operating resistance Rz
- Halogen-free / RoHS compliant (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

Marking Symbol: LJ

## Packaging

Embossed type (Thermo-compression sealing) : 10000 pcs / reel (standard)

- Absolute Maximum Ratings $\mathrm{Ta}=25^{\circ} \mathrm{C}$

| Parameter | Symbol | Rating | Unit |
| :--- | :---: | :---: | :---: |
| Repetitive peak forward current | IFRM | 200 | mA |
| Total power dissipation $^{* 1}$ | PT | 120 | mW |
| Electrostatic discharge $^{* 2}$ | ESD | $\pm 8$ | kV |
| Junction temperature | Tj | 150 | ${ }^{\circ} \mathrm{C}$ |
| Operating ambient temperature | Topr | -40 to +85 | ${ }^{\circ} \mathrm{C}$ |
| Storage temperature | Tstg | -55 to +150 | ${ }^{\circ} \mathrm{C}$ |

Note) *1: Mounted on glass epoxy print board. ( $45 \mathrm{~mm} \times 45 \mathrm{~mm} \times 1 \mathrm{~mm}$ )
Solder in ( $0.4 \mathrm{~mm} \times 0.3 \mathrm{~mm}$ )
*2: Test method:IEC61000_4_2(C = $150 \mathrm{pF}, \mathrm{R}=330 \Omega$, Contact discharge: 10 times)


Internal Connection


Electrical Characteristics $\mathrm{Ta}=25^{\circ} \mathrm{C} \pm 3^{\circ} \mathrm{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Forward voltage | VF | IF $=10 \mathrm{~mA}$ |  |  | 1.0 | V |
| Zener voltage ${ }^{\text {*1, }{ }^{2}}$ | VZ | $\mathrm{IZ}=5 \mathrm{~mA}$ | 8.65 |  | 9.56 | V |
| Zener operating resistance | RZ | $\mathrm{IZ}=5 \mathrm{~mA}$ |  |  | 20 | $\Omega$ |
| Zener rise operating resistance | RZK | $\mathrm{I}=0.5 \mathrm{~mA}$ |  |  | 60 | $\Omega$ |
| Reverse current | IR | $\mathrm{VR}=6.0 \mathrm{~V}$ |  |  | 0.1 | $\mu \mathrm{A}$ |
| Temperature coefficient of zener voltage ${ }^{\text {N3 }}$ | SZ | $\mathrm{IZ}=5 \mathrm{~mA}$ |  | 5.8 |  | $\mathrm{mV} /{ }^{\circ} \mathrm{C}$ |

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 $25^{\circ} \mathrm{C}$ for VZ mesurement.

VZ value measured at other temperature must be adjusted to $\mathrm{VZ}\left(25^{\circ} \mathrm{C}\right)$
*2 VZ guaranted 20 ms after current flow.
*3 $\mathrm{Tj}=25^{\circ} \mathrm{C}$ to $150^{\circ} \mathrm{C}$

## Technical Data ( reference )



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- Land Pattern (Reference) (Unit: mm)



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