## DE2S06200L

## 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: E1

Packaging
Embossed type (Thermo-compression sealing) 3000 pcs / reel (standard)

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

| Parameter | Symbol | Rating | Unit |
| :--- | :---: | :---: | :---: |
| Total power dissipation ${ }^{* 1}$ | PT | 150 | mW |
| ${\text { Electrostatic discharge }{ }^{* 2}}^{\text {Junction temperature }}$ | ESD | $\pm 30$ | kV |
| Operating ambient temperature | Tj | 150 | ${ }^{\circ} \mathrm{C}$ |
| Storage temperature | Topr | -40 to +85 | ${ }^{\circ} \mathrm{C}$ |

Note) *1: Mounted on glass epoxy print board. ( $45 \mathrm{~mm} \times 45 \mathrm{~mm} \times 1 \mathrm{~mm}$ )
Solder in ( $0.8 \mathrm{~mm} \times 0.6 \mathrm{~mm}$ )
*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 |
| :--- | :---: | :--- | :---: | :---: | :---: | :---: |
| Zener voltage ${ }^{* 1,{ }^{2} 2}$ | VZ | $\mathrm{IZ}=1 \mathrm{~mA}$ | 5.89 |  | 6.51 | V |
| Reverse current | IR | $\mathrm{VR}=4 \mathrm{~V}$ |  |  | 1.0 | $\mu \mathrm{~A}$ |
| Terminal capacitance | Ct | $\mathrm{VR}=0 \mathrm{~V}, \mathrm{f}=1 \mathrm{MHz}$ |  | 55 |  | pF |
| Temperature coefficient of zener voltage ${ }^{* 3}$ | SZ | $\mathrm{IZ}=1 \mathrm{~mA}$ |  | 2.3 | $\mathrm{mV} /{ }^{\circ} \mathrm{C}$ |  |

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.
2. *1: The temperature must be controlled $25^{\circ} \mathrm{C}$ 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)


Technical Data (reference)


PZSM - tw



Land Pattern (Reference) (Unit: mm)


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