## 1. Scope

The present specifications shall apply to Sanken silicon diode, EN01Z.
2. Outline

| Type | Silicon Rectifier Diode (Mesa type) |
| :--- | :--- |
| Structure | Resin Molded $\quad$ Flammability: UL94V-0 (Equivalent) |
| Applications | Pulse Rectification, etc |

3. Absolute maximum ratings

| No. | Item | Symbol | Unit | Rating | Conditions |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 1 | Transient Peak Reverse Voltage | $\mathrm{V}_{\mathrm{RSM}}$ | V | 200 |  |
| 2 | Peak Reverse Voltage | $\mathrm{V}_{\mathrm{RM}}$ | V | 200 | $\mathrm{Tl}=107^{\circ} \mathrm{C}$, Sinewave |
| 3 | Average Forward Current | $\mathrm{I}_{\mathrm{F}(\mathrm{AV})}$ | A | 1.5 | 10 msec. <br> Sinewave, one shot |
| 4 | Peak Surge Forward Current | $\mathrm{I}_{\mathrm{FSM}}$ | A | 50 |  |
| 5 | Junction Temperature | $\mathrm{T}_{\mathrm{j}}$ | ${ }^{\circ} \mathrm{C}$ | $-40 \sim+150$ |  |
| 6 | Storage Temperature | $\mathrm{T}_{\mathrm{stg}}$ | ${ }^{\circ} \mathrm{C}$ | $-40 \sim+150$ |  |

4. Electrical characteristics $\left(\mathrm{Ta}=25^{\circ} \mathrm{C}\right.$, unless otherwise specified)

| No. | Item | Symbol | Unit | Value | Conditions |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Forward Voltage Drop | $\mathrm{V}_{\mathrm{F}}$ | V | 0.92 max. | $\mathrm{I}_{\mathrm{F}}=1.5 \mathrm{~A}$ |
| 2 | Reverse Leakage Current | $\mathrm{I}_{\mathrm{R}}$ | $\mu \mathrm{A}$ | 10 max. | $\mathrm{V}_{\mathrm{R}}=\mathrm{V}_{\mathrm{RM}}$ |
| 3 | Reverse Leakage Current Under High Temperature | $\mathrm{H} \cdot \mathrm{I}_{\mathrm{R}}$ | mA | 2.0 max. | $\mathrm{V}_{\mathrm{R}}=\mathrm{V}_{\mathrm{RM}}, \mathrm{T}_{\mathrm{j}}=150^{\circ} \mathrm{C}$ |
| 4 | Reverse Recovery Time | t rr1 | ns | 100 max. | @ $\begin{gathered}\mathrm{IF}=\mathrm{IRP}=100 \mathrm{~mA} \\ 90 \% \text { Recovery point }\end{gathered}$ |
|  |  | t rr2 | ns | 50 max. | @ $\mathrm{IF}=100 \mathrm{~mA}, \mathrm{IRP}=200 \mathrm{~mA}$, $75 \%$ Recovery point |
| 5 | Thermal Resistance | Rth(j-1) | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ | 20 max. | Between Junction and Lead |

5. Derating


6. Dimensions, inner structure and marking

6-1 Dimensions refer


Dimensions in mm
*1 The allowance position of body against the center of whole lead wire is 0.5 mm (max.)
*2 The centric allowance of lead wire against center of physical body is 0.3 mm (max.)
*3 The burr may exist up to 2 mm from the body of lead.

6-2 Appearance
The body shall be clean and shall not bear any stain, rust or flaw.
The color of the case will be black.
6-3 Marking


