1. Scope

The present specifications shall apply to Sanken silicon rectifier diode, AU01A.

2. Outline

| Туре | Silicon Rectifier Diode (Mesa Type) | | | | |
|--------------|-------------------------------------|--|--|--|--|
| Structure | Resin Molded | | | | |
| Applications | High Frequency Rectification, etc. | | | | |

3. Flammability

UL94V-0 (equipment)

4. Absolute maximum ratings

| No. | Item | Symbol | Unit | Rating | Conditions |
|-----|--------------------------------|---------------------|------|----------|----------------------------------|
| 1 | Transient Peak Reverse Voltage | V_{RSM} | V | 650 | |
| 2 | Peak Reverse Voltage | V_{RM} | V | 600 | |
| 3 | Average Forward Current | I _{F (AV)} | A | 0.5 | Refer to 6 |
| 4 | Peak Surge Forward Current | I_{FSM} | A | 15 | 10ms. Half sinewave, one shot |
| 5 | Junction Temperature | T _j | °C | -40~+150 | |
| 6 | Storage Temperature | T_{stg} | °C | -40~+150 | |

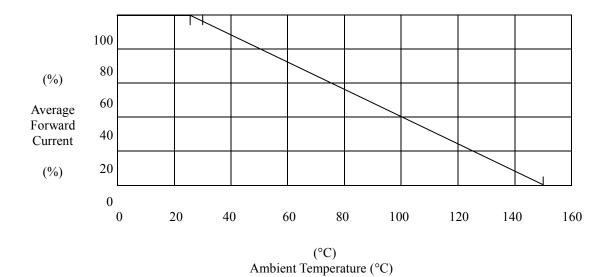
5. Electrical characteristics

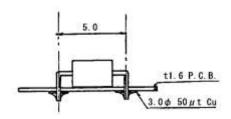
| No. | Item | Symbol | Unit | Value | Conditions |
|-----|---|------------------|------|----------|--|
| 1 | Forward Voltage Drop | V_{F} | V | 1.7 max. | $I_F = 0.5A$ |
| 2 | Reverse Leakage Current | I_R | μΑ | 10 max. | $V_R = V_{RM}$ |
| 3 | Reverse Leakage Current Under High Temperature | HI_R | μΑ | 150 max. | V _R =V _{RM} , Ta=100°C |
| 4 | Reverse Recovery Time | trr-1 | nS | 400 max. | I _F =I _{RP} =10mA, 90% Tj=25°C, Recovery point |
| | | trr-2 | nS | 180 max. | I _F =10mA, I _{RP} =20mA, Tj=25°C 75% Recovery point |
| 5 | Thermal Resistance | Rth (j-l) | °C/W | 22 max. | Between Junction and Lead |

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6. Derating

Deratings to the ambient temperature Power loss generated by voltage is not taken into consideration.





Dimensions in mm

7. Package information

7.1 Dimensions

Marking 2000 125 98 125

- *1 The allowance position of Body against the center of whole lead wire is 0.5mm(max.)
- *2 The centric allowance of lead wire against center of physical body is 0.2mm(max.)
- *3 The burr may exit up to 2mm from the body of lead
- *4 Whole lead wire is $62.0^{\pm 1.0}$, with 52mm taping.

7.2 Appearance

The body shall be clean and shall not bear any stain, rust or flaw.

The color of the case will be black.

7.3 Marking Type number

①Type number: AU01 is abbreviated as U

 $\textcircled{2} \ V_{RM} \ rank \qquad A:600V$

A:600V

③ Lot number

First digit: Last digit of Year

Second digit: Month

From 1 to 9 for Jan. to Sep.

O for Oct., N for Nov., and D for Dec.

Cathode band

The type No., VRM rank and lot number are to be marked in Silver.