

Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Sanken](#)
[ES01AW](#)

For any questions, you can email us directly:

sales@integrated-circuit.com

SANKEN ELECTRIC CO., LTD.

ES01A

1 Scope

The present specifications shall apply to Sanken silicon diode, ES01A.

2 Outline

Type	Silicon Rectifier Diode (Mesa type)
Structure	Resin Molded
Applications	Pulse Rectification, etc

3 Flammability

UL94V-0 (Equivalent)

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	0.7	Refer to derating curve in Section 7
4	Peak Surge Forward Current	I_{FSM}	A	20	50Hz. Half-Sinewave, one shot
5	Junction Temperature	T_j	°C	-40 to +150	
6	Storage Temperature	T_{stg}	°C	-40 to +150	

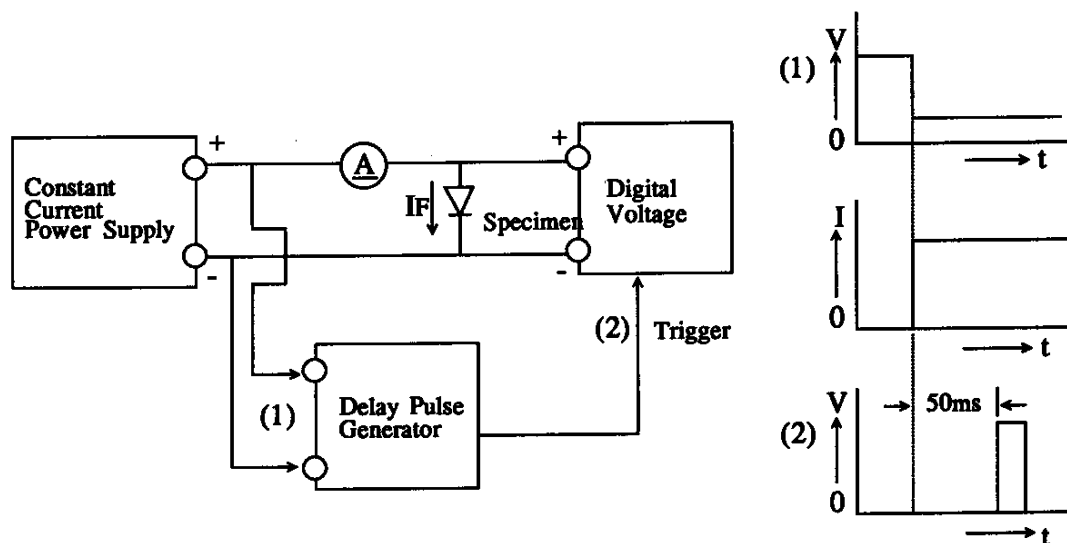
5 Electrical characteristics (Ta=25°C, unless otherwise specified)

No.	Item	Symbol	Unit	Rating	Conditions
1	Forward Voltage Drop	V_F	V	3.0 max.	$I_F=0.8A$
2	Reverse Leakage Current	I_R	μA	10 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	μA	200 max.	$V_R=V_{RM}$, Ta=100°C
4	Reverse Recovery Time	trr1	μs	1.5 max.	@ $I_F=I_{RP}=10mA$ 90% Recovery point
		trr2	μs	0.6 max.	@ $I_F=10mA$, $I_{RP}=20mA$, 75% Recovery point
5	Thermal Resistance	$R_{th(j-l)}$	°C/W	20 max.	Between Junction and Lead

SANKEN ELECTRIC CO., LTD.

ES01A

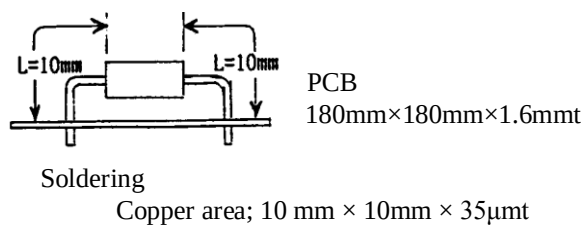
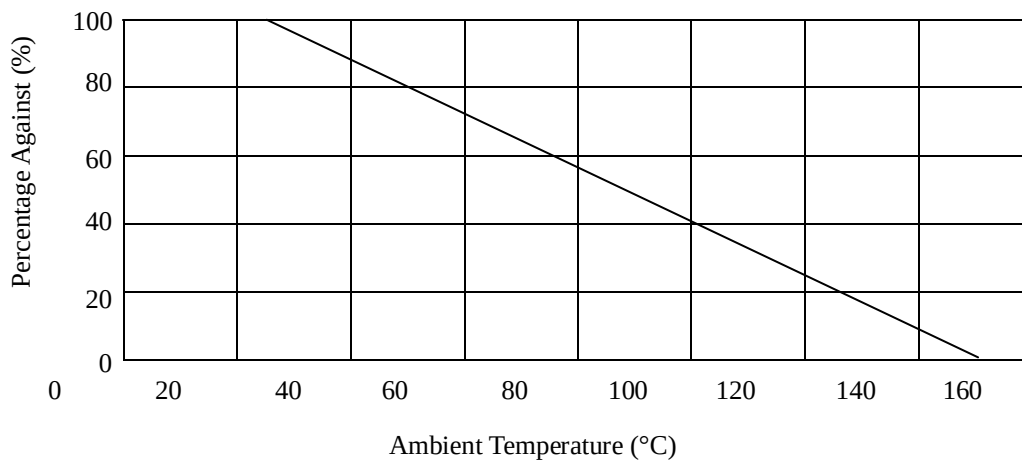
6 V_F test and test circuit



7 Derating

Derating to the ambient temperature.

Power loss generated by voltage is not taken into consideration.

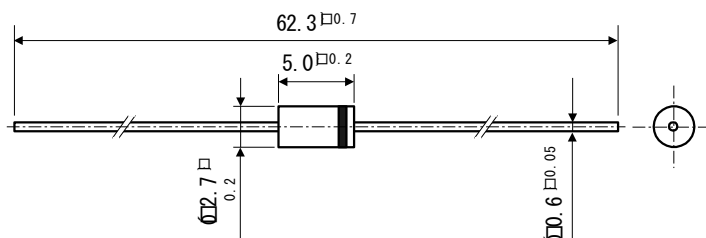


SANKEN ELECTRIC CO., LTD.

ES01A

8 Package information

8-1 Package type, physical dimensions and material



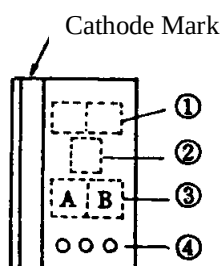
Dimensions in mm

- *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

8-2 Appearance

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

8-3 Marking



- ① Type number S0 as abbreviated of ES01.
- ② Class number : Z
- ③ Lot number
 - A : Last digit of calendar year
 - B : Month (From 1 to 9 for Jan. to Sep. O for Oct. N for Nov. D for Dec.)
- ④ Ten days (· first ten days, · · second ten days, · · · third ten days)