



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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1. Scope

The present specifications shall apply to Sanken silicon diode, ES01F.

2. Outline

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

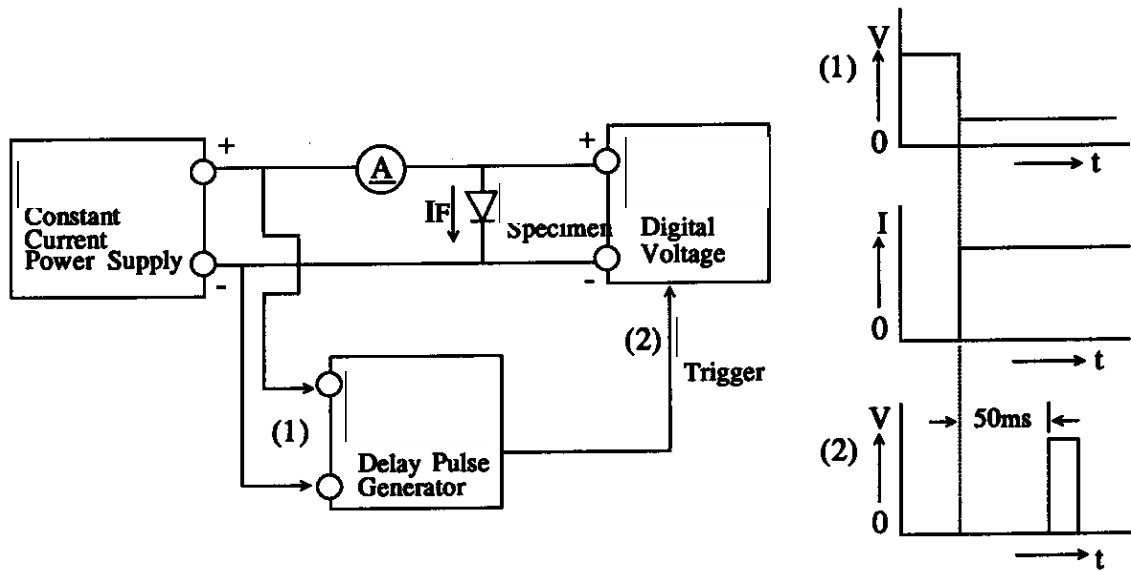
3. Absolute maximum ratings

No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	1550	
2	Peak Reverse Voltage	V_{RM}	V	1500	
3	Average Forward Current	$I_{F(AV)}$	A	0.5	Refer to Derating of 6
4	Peak Surge Forward Current	I_{FSM}	A	15	10msec. Sinewave, one shot
5	Junction Temperature	T_j	°C	-40~+150	
6	Storage Temperature	T_{stg}	°C	-40~+150	

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

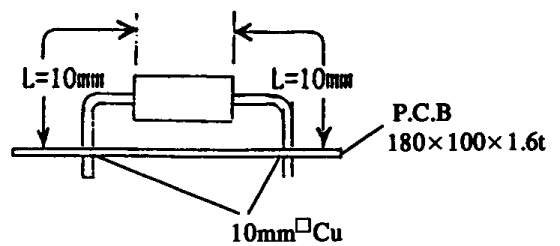
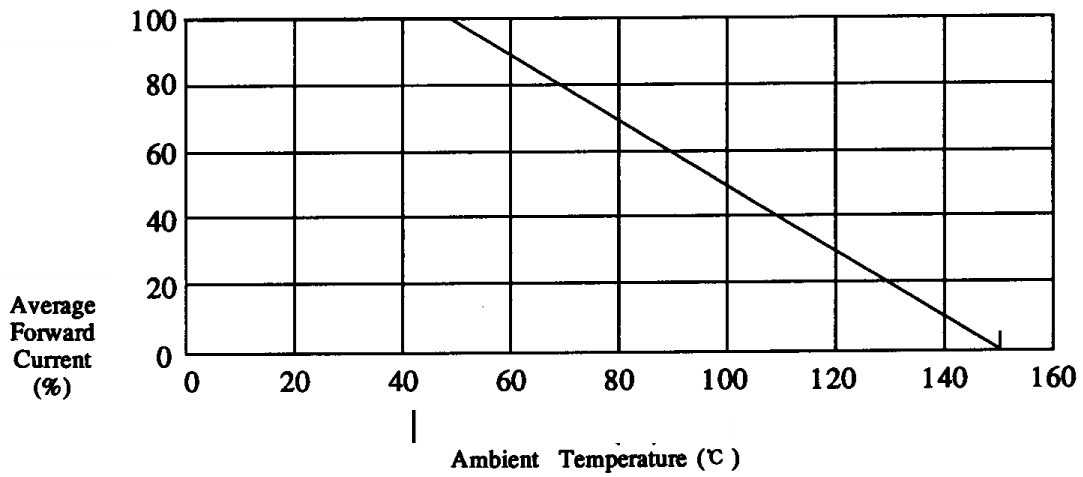
No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	2.0 max.	$I_F=0.5A$
2	Reverse Leakage Current	I_R	μA	10 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	μA	200 max.	$V_R=V_{RM}$, Ta=100°C
4	Reverse Recovery Time	t_{rr1}	μs	1.5 max.	@ $I_F=I_{RP}=10mA$ 90% Recovery point
		t_{rr2}	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

5. V_F test and test circuit



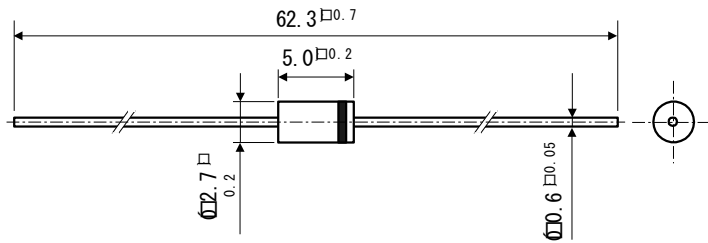
6. Derating

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



7.Package information

7-1 Package type, physical dimensions and material



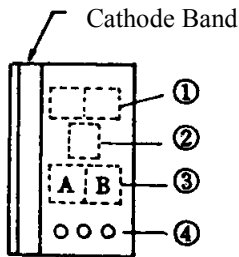
Dimensions in mm

- *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

7-2 Appearance

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

7-3 Marking



- ① T type number S0 as abbreviated of ES01F.
- ② Class number F: 1500V type
- 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)

The type No. V_{RM} rank and Lot No. are to be marked in white