1. Scope

The present specifications shall apply to an AL01.

2. Outline

Type	Silicon Diode
Structure	Resin Molded
Applications	High Frequency Rectification

3. Flammability

UL94V-0(Equivalent)

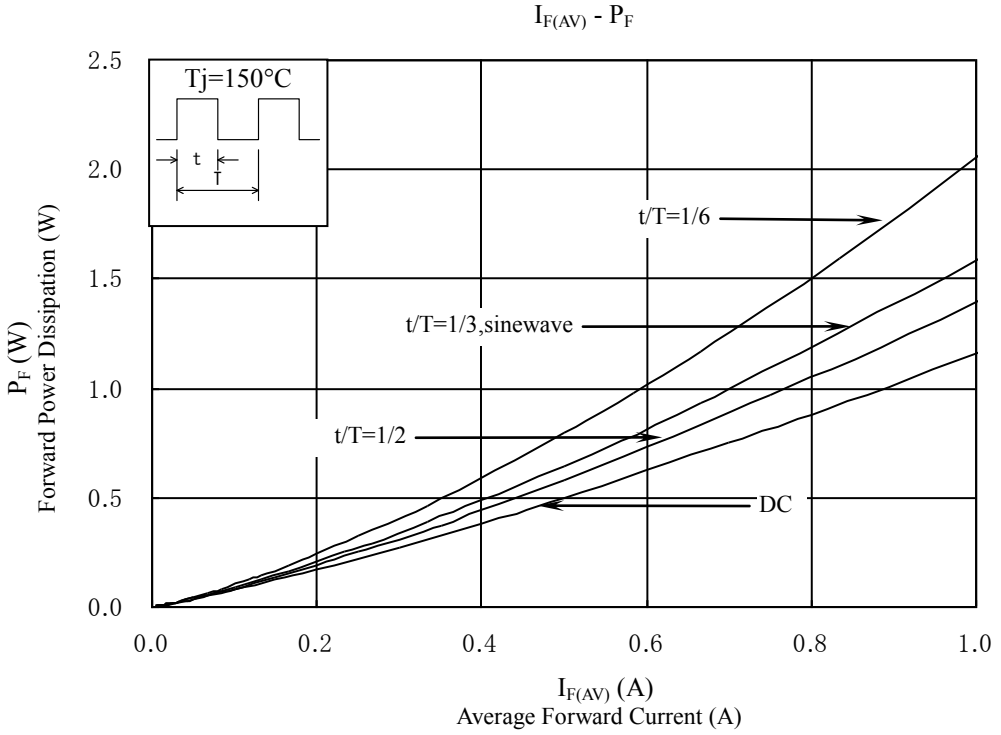
4. Absolute maximum ratings

No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	400	
2	Peak Reverse Voltage	V_{RM}	V	400	
3	Average Forward Current	$I_{F(AV)}$	A	1.0	Refer to Derating of 7
4	Peak Surge Forward Current	I_{FSM}	A	20	10msec. Half sinewave, one shot
5	I^2t Limiting Value	I^2t	A^2s	2.0	1msec≤t≤10msec
6	Junction Temperature	T_j	°C	-40~+150	
7	Storage Temperature	T_{stg}	°C	-40~+150	

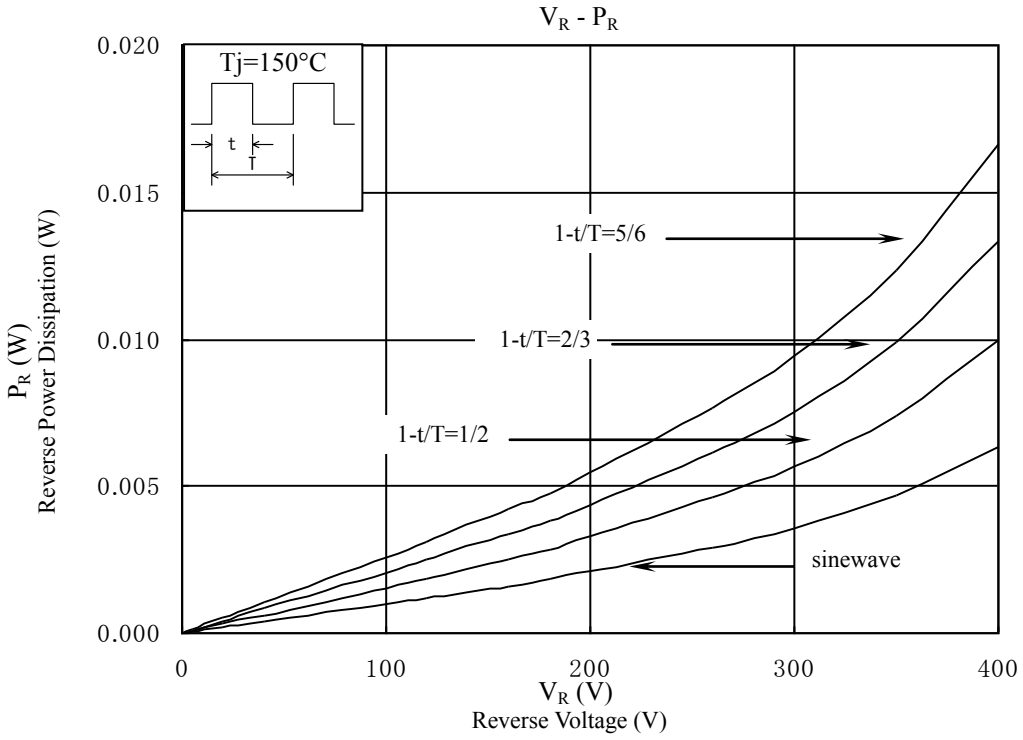
5. Electrical characteristics (Ta=25°C , unless otherwise specified)

No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	1.4 max.	I_F=1.0A
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	50 max.	$V_R=V_{RM}$, T_j=150°C
4	Reverse Recovery Time	$t_{rr}1$	ns	50 max.	$I_F=I_{RP}$=100mA 90% Recovery point, T_j=25°C
		$t_{rr}2$	ns	35 max.	I_F=100mA, I_{RP}=200mA 75% Recovery point, T_j=25°C
5	Thermal Resistance	$R_{th(j-l)}$	°C /W	22 max.	Between Junction and Lead

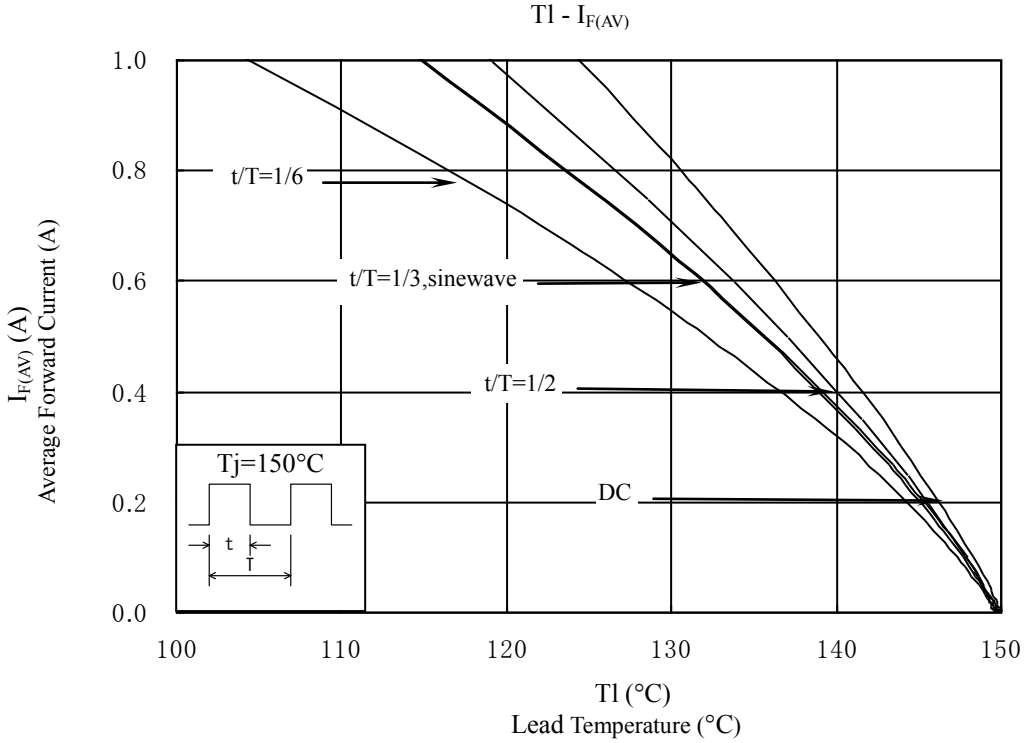
6. Characteristics



7.

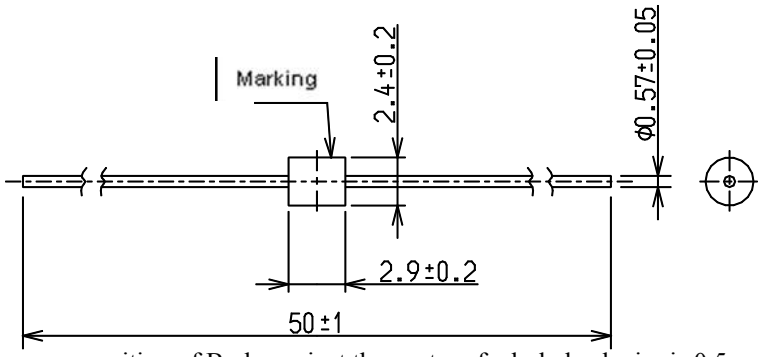


8. Derating


Tl - $I_{F(AV)}$
1.0
0.8
0.6
0.4
0.2
0.0
t/T=1/6
t/T=1/3,sinewave
t/T=1/2
DC
Tj=150°C
t
T
100
110
120
130
140
150
$I_{F(AV)}$ (A)
Average Forward Current (A)
Tl (°C)
Lead Temperature (°C)

9. Package information

9-1 Dimensions



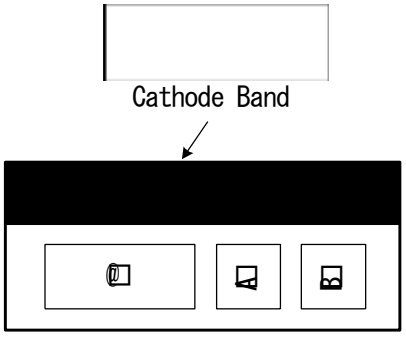
Dimensions in mm

*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
*4 Whole lead wire is 62.0±1.0, with 52mm taping.

9-2 Appearance

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

9-3 Marking



① Type number：AL01 is abbreviated as L

② Lot number 1
Last digit of Year

③ Month
From 1 to 9 for Jan. to Sep.
O for Oct., N for Nov., and D for Dec.