1. Scope

The present specifications shall apply to an RU1P.

2. Outline

Type	Silicon Diode
Structure	Resin Molded
Applications	High Frequency Rectification

3. Flammability

UL94V-0(Equivalent)

4. Absolute maximum ratings

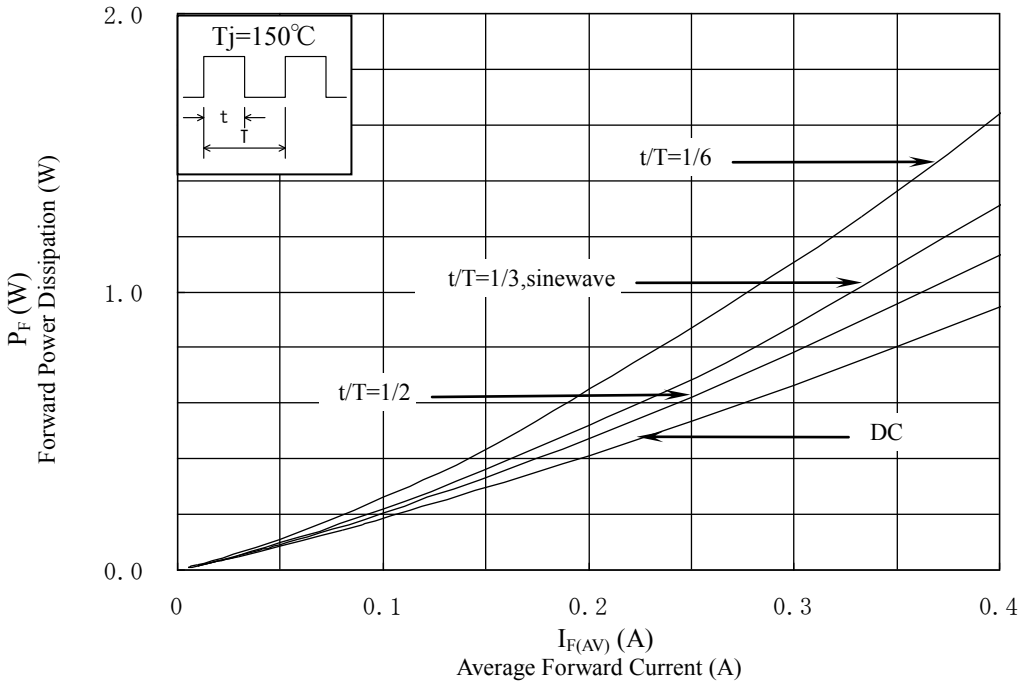
No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	1000	
2	Peak Reverse Voltage	V_{RM}	V	1000	
3	Average Forward Current	$I_{F(AV)}$	A	0.4	Refer to Derating of 7
4	Peak Surge Forward Current	I_{FSM}	A	10	10msec. Half sinewave, one shot
5	I^2t Limiting Value	I^2t	A^2s	0.5	
5	Junction Temperature	T_j	°C	-40～+150	
6	Storage Temperature	T_{stg}	°C	-40～+150	

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

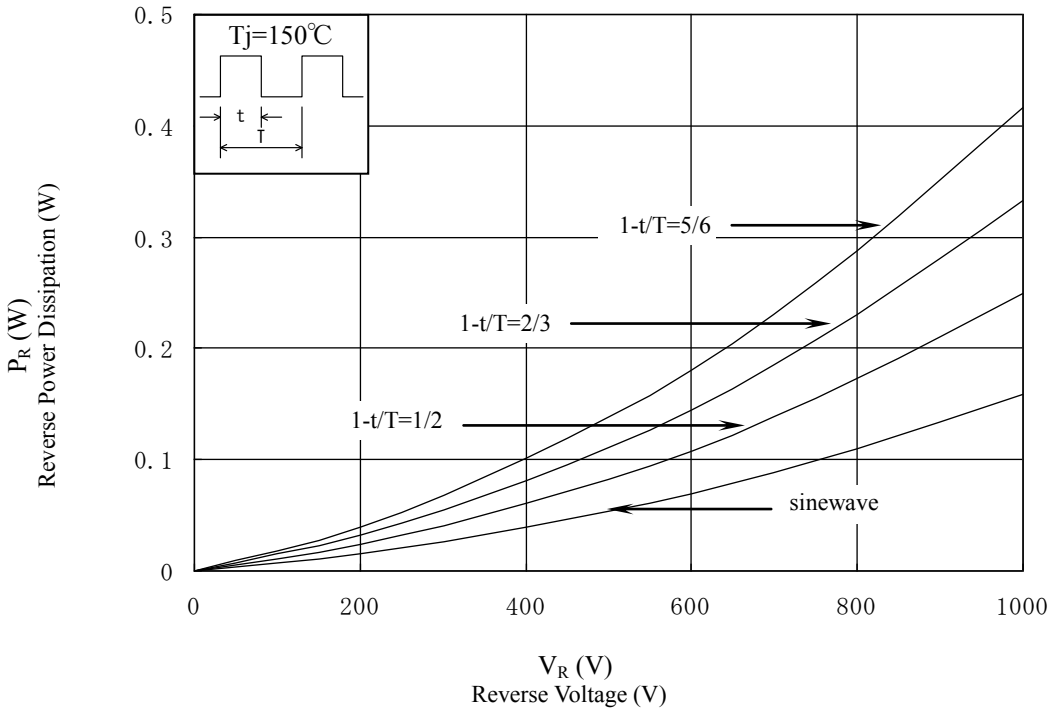
No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	4.0 max.	I_F=0.4A
2	Reverse Leakage Current	I_R	uA	5.0 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	uA	500 max.	$V_R=V_{RM}$, T_j=150℃
4	Reverse Recovery Time	$t_{rr}1$	ns	100 max.	$I_F=I_{RP}$=100mA 90% Recovery point, T_j=25°C
		$t_{rr}2$	ns	50 max.	I_F=100mA， I_{RP}=200mA 75% Recovery point, T_j=25°C
5	Thermal Resistance	$R_{th(j-l)}$	°C /W	15 max.	Between Junction and Lead

6. Characteristics

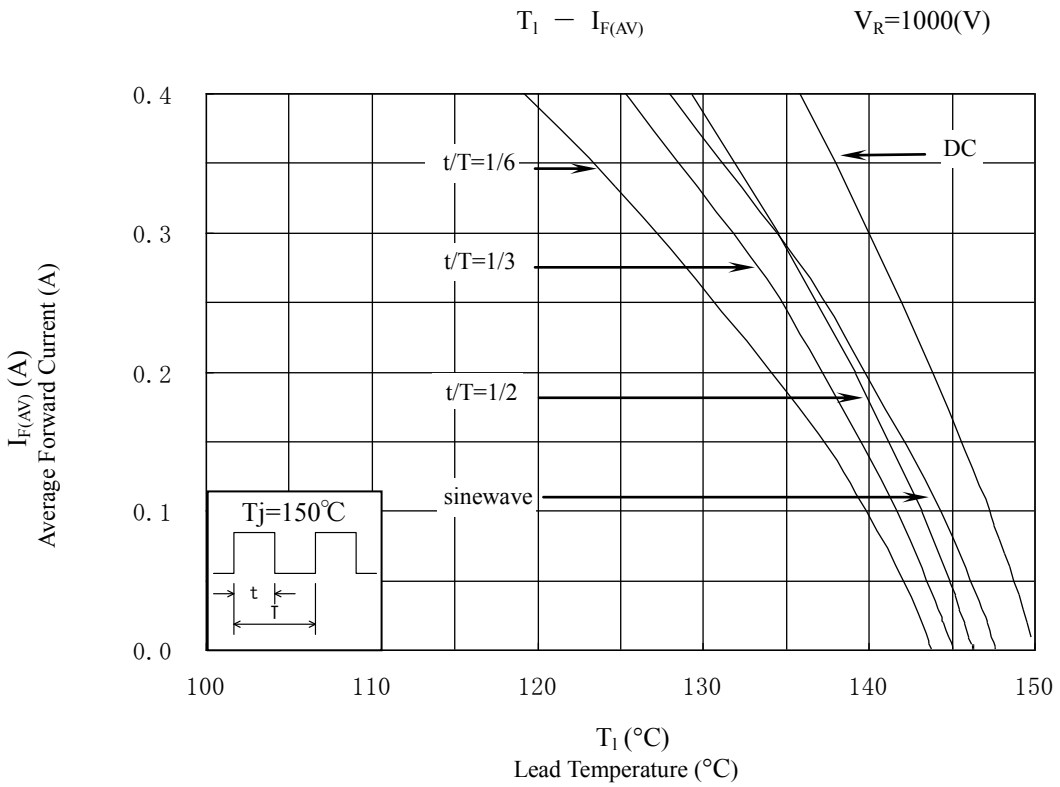
$I_{F(AV)}$ – P_F



V_R – P_R

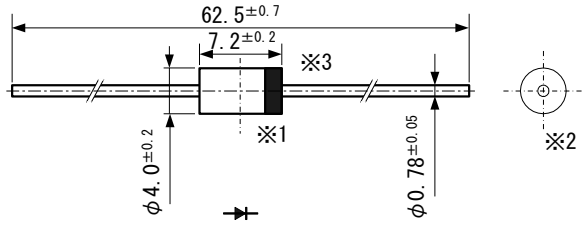


7. Derating


T_l — $I_{F(AV)}$
V_R=1000(V)
0.4
0.3
0.2
0.1
0.0
t/T=1/6
t/T=1/3
t/T=1/2
sinewave
DC
Tj=150℃
t
T
100
110
120
130
140
150
$I_{F(AV)}$ (A)
Average Forward Current (A)
T_l (°C)
Lead Temperature (°C)

8. Package information

8-1 Package type, physical dimensions and material



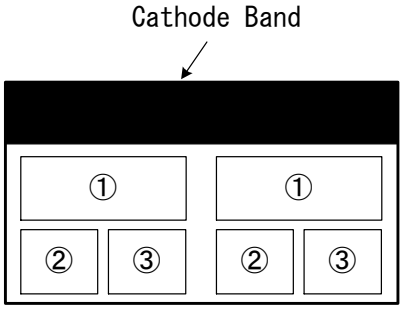
*1 The allowance position of Body against the center of whole lead wire is 0.5mm(max.)
*2 The centric allowance of lead wire against center of physical body is 0.3mm(max.)
*3 The burr may exit up to 2mm from the body of lead

Dimensions in mm

8-2 Appearance

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

8-3 Marking



① Type number RU1P

② Lot number 1
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.

③ Lot number 2 (ten days)
・ : Top of the month
・・ : Middle of month
・・・ : End of month