

1 Scope

The present specifications shall apply to an RF1B.

2 Outline

Type	Silicon Diode
Structure	Resin Molded
Applications	High Frequency Rectification

3 Flammability

UL94V-0(Equivalent)

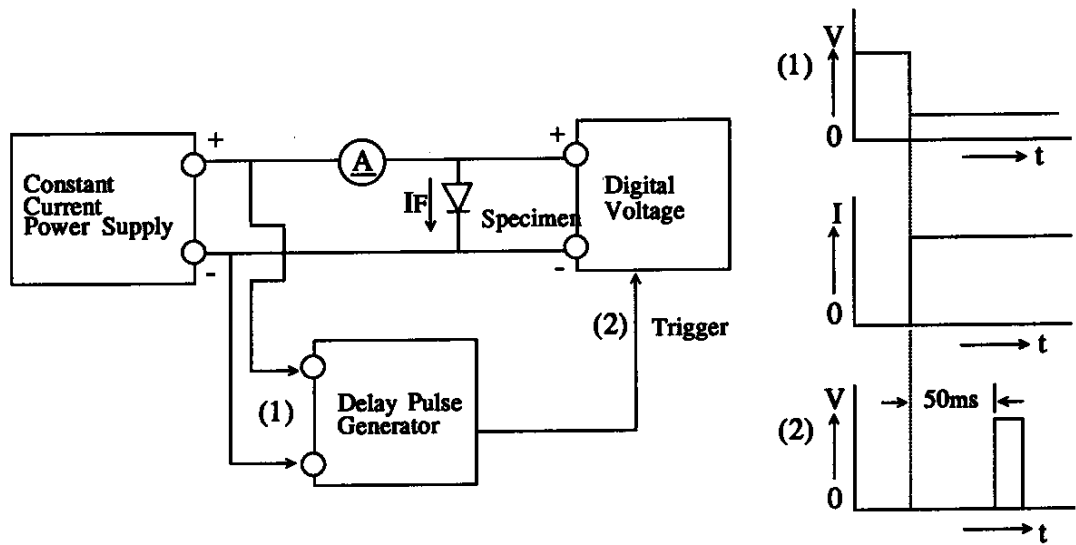
4 Absolute maximum ratings

No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	850	
2	Peak Reverse Voltage	V_{RM}	V	800	
3	Average Forward Current	$I_{F(AV)}$	A	0.6	Refer to derating curve in Section 7
4	Peak Surge Forward Current	I_{FSM}	A	15	10ms. Half sine wave, one shot
5	I^2t Limiting Value	I^2t	A^2s	1.125	$1\text{ ms} \leq t \leq 10\text{ ms}$
6	Junction Temperature	T_j	°C	-40 to +150	
7	Storage Temperature	T_{sig}	°C	-40 to +150	

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

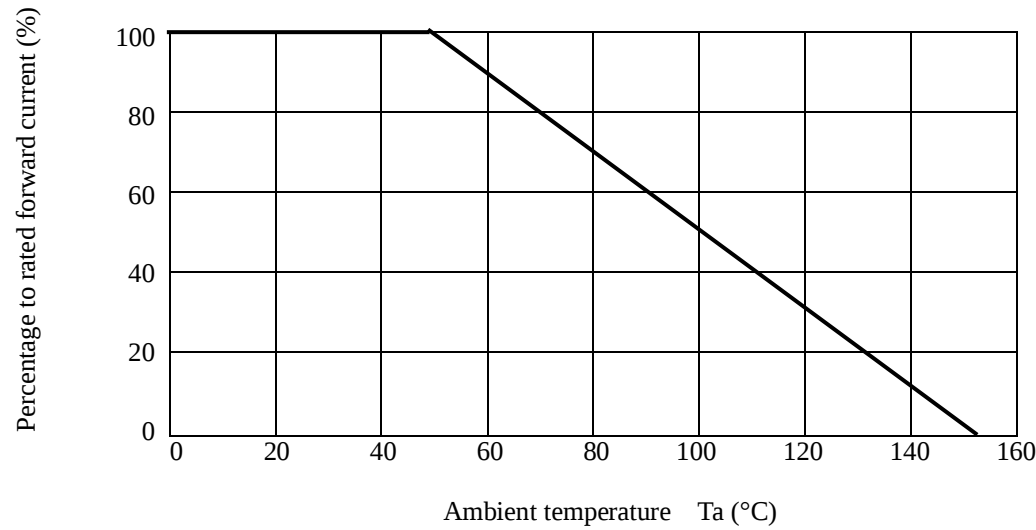
No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	2.0 max.	$I_F=1.0A$
2	Reverse Leakage Current	I_R	μA	10 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	μA	200 max.	$V_R=V_{RM}$, $T_j=100^\circ C$
4	Reverse Recovery Time	trr-1	ns	400 max.	$I_F=I_{RP}=10mA$ 90% Recovery point, $T_j=25^\circ C$
		trr-2	ns	180 max.	$I_F=10mA$, $I_{RP}=20mA$ 75% Recovery point, $T_j=25^\circ C$
5	Thermal Resistance	$R_{th(j-l)}$	°C /W	15 max.	Between Junction and Lead

6 V_F test and test circuit



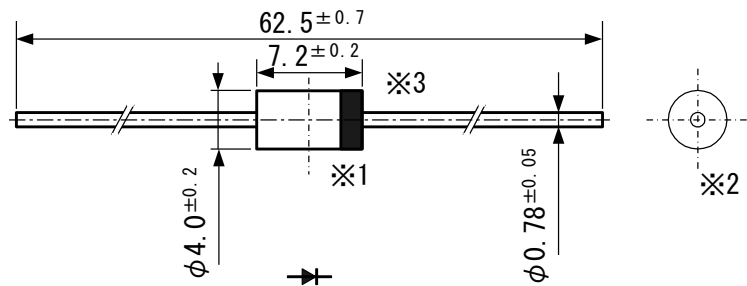
7 Derating

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



8 Package information

8-1Package 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 0.3mm(max.)
- *3 The burr may exit up to 2mm from the body of lead

8-2Appearance

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

8-3Marking

Cathode Mark

The diagram shows a black rectangular cathode mark above a grid of numbers. The grid consists of two rows of four boxes. The top row contains two boxes with the number 1. The bottom row contains two boxes with the number 2 and two boxes with the number 3.

- ① Type number : RF1B
- 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

The color of marking must be white.