

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)

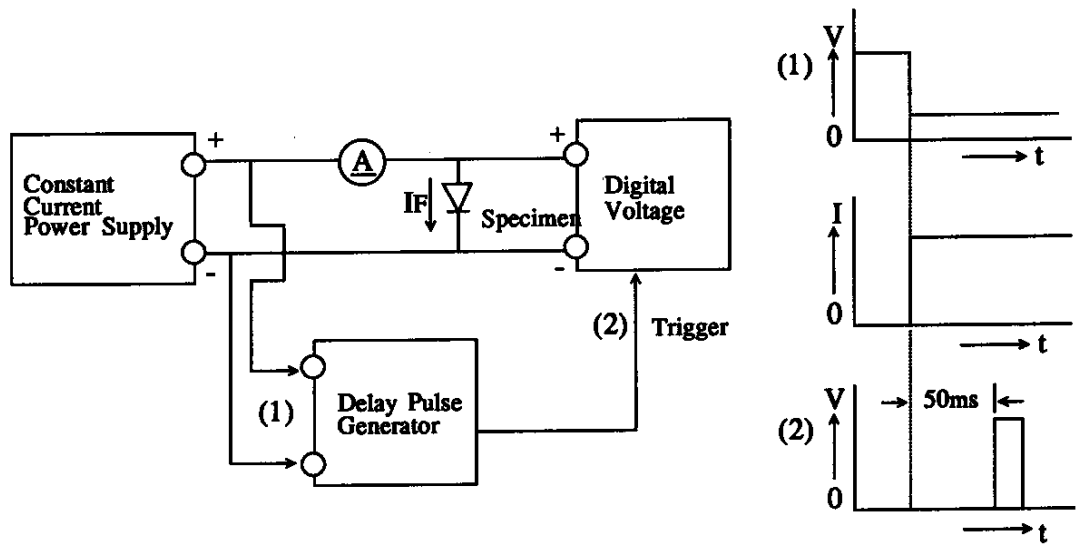
4 Absolute maximum ratings

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)

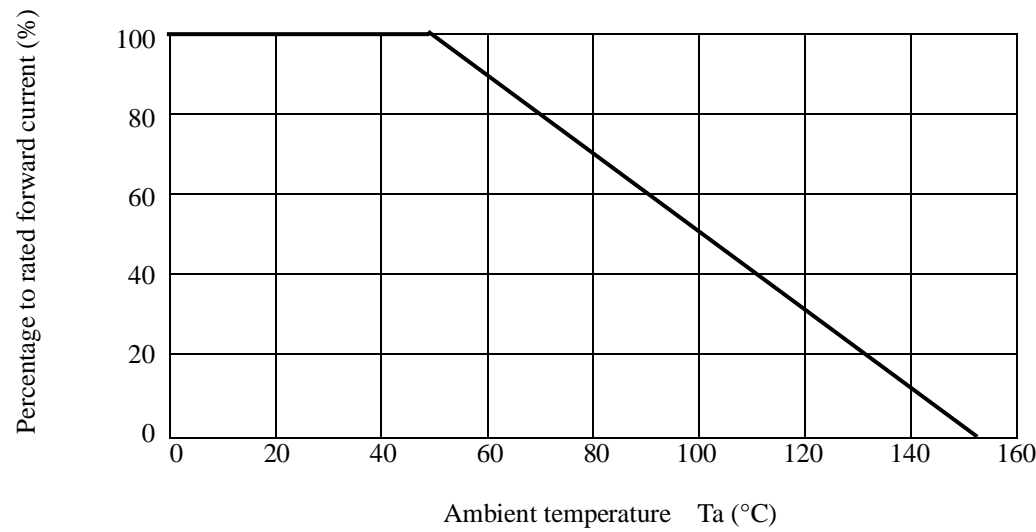
No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	2.0 max.	$I_F=1.0A$
2	Reverse Leakage Current	I_R	μA	10 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	μA	200 max.	$V_R=V_{RM}$, $T_j=100^\circ C$
4	Reverse Recovery Time	trr-1	ns	400 max.	$I_F=I_{RP}=10mA$ 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



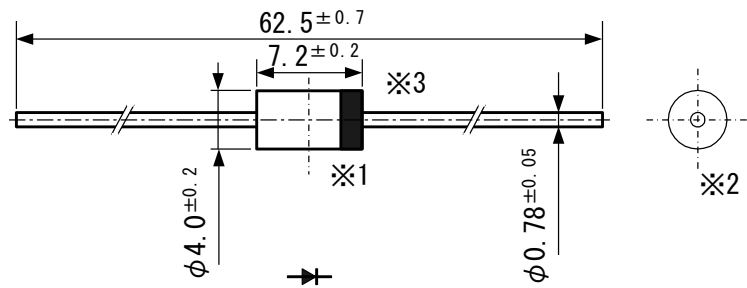
7 Derating

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. The grid has two rows and four columns. The top row has two boxes labeled ①. The bottom row has four boxes labeled ②, ③, ②, 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.