

## 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)

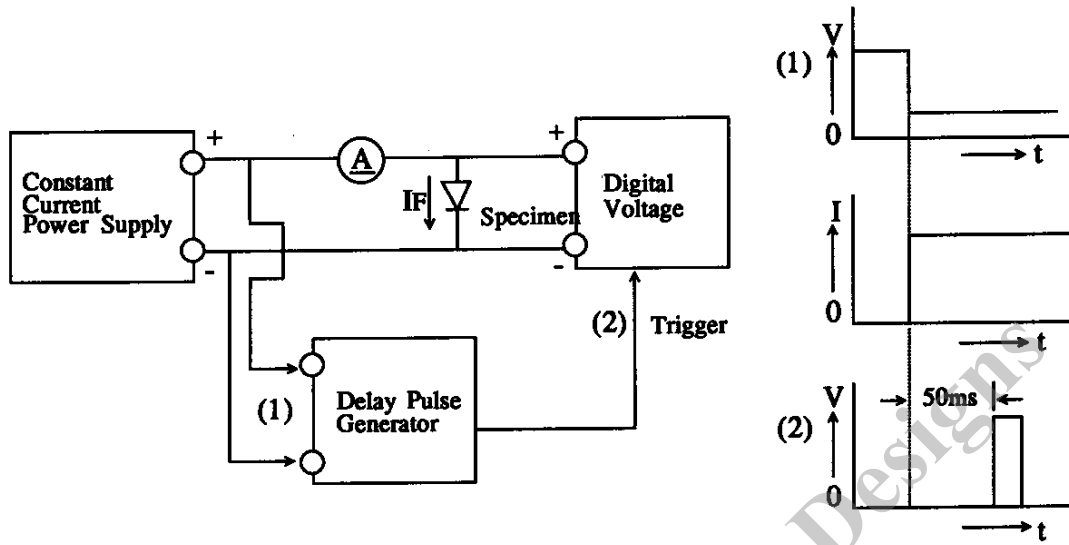
## 4 Absolute maximum ratings

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	$T_j$	$^{\circ}C$	-40 to +150	
7	Storage Temperature	$T_{stg}$	$^{\circ}C$	-40 to +150	

5 Electrical characteristics ( $T_a=25^{\circ}C$  , unless otherwise specified)

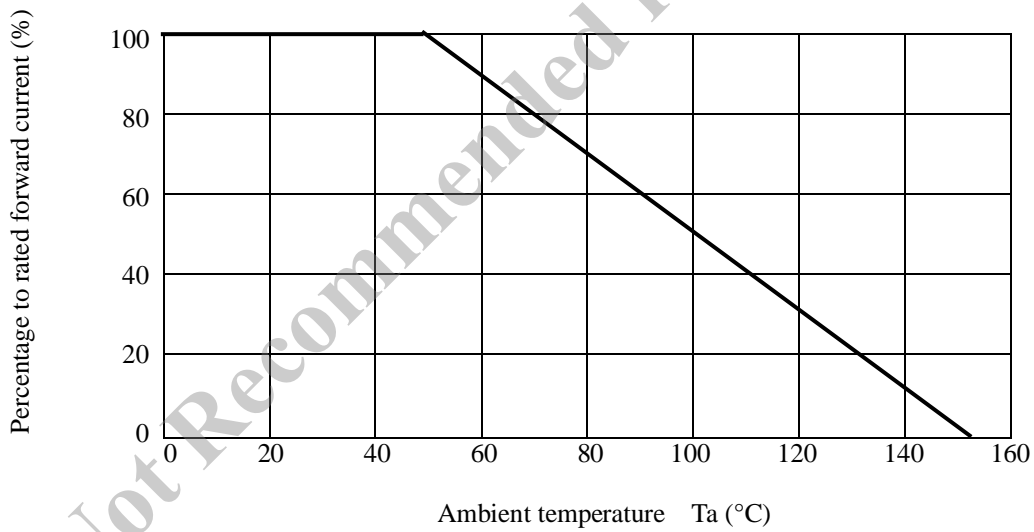
No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	$V_F$	V	2.0 max.	$I_F=1.0A$
2	Reverse Leakage Current	$I_R$	$\mu A$	10 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	$\mu A$	200 max.	$V_R=V_{RM}, T_j=100^{\circ}C$
4	Reverse Recovery Time	trr-1	ns	400 max.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

6  $V_F$  test and test circuit



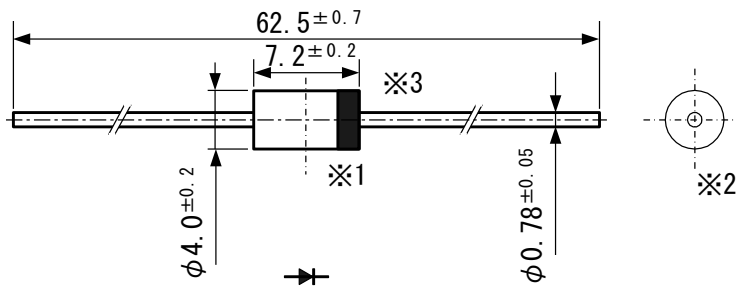
7 Derating

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



8 Package information

8-1 Package type, physical dimensions and material



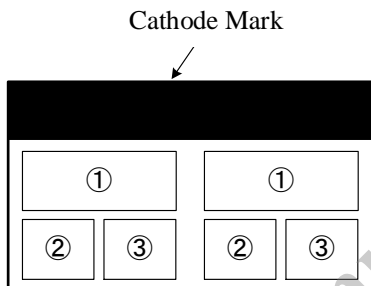
Dimensions in mm

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

8-2 Appearance

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

8-3 Marking



- 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.