

1 Scope

The present specifications shall apply to an RS1B.

2 Outline

Type	Silicon Diode
Structure	Resin Molded
Applications	High Frequency Rectification

3 Flammability

UL94V-0(Equivalent)

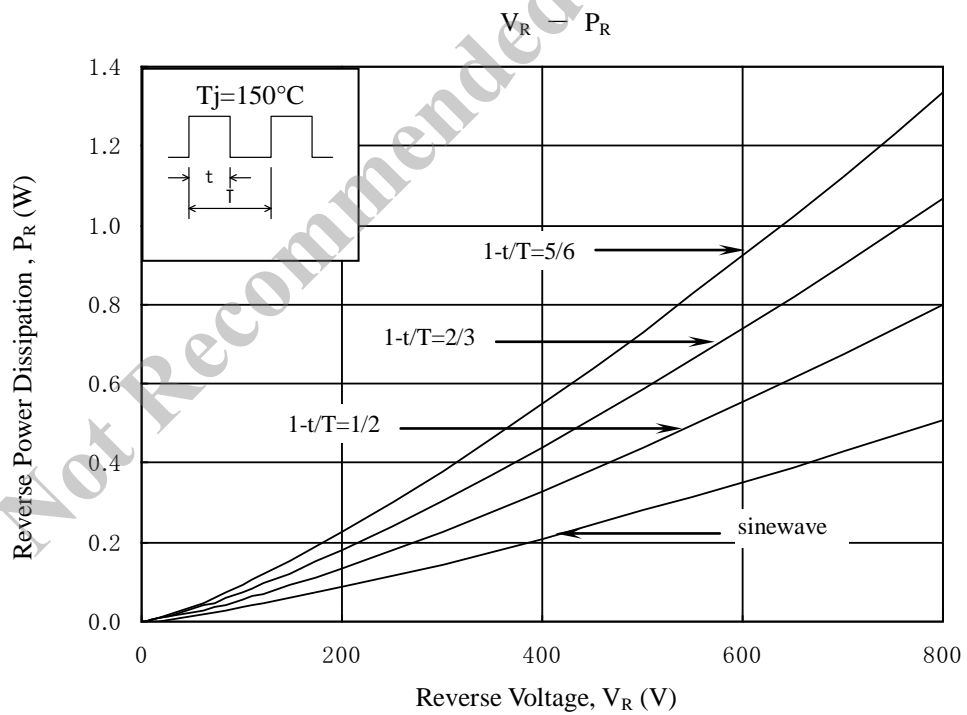
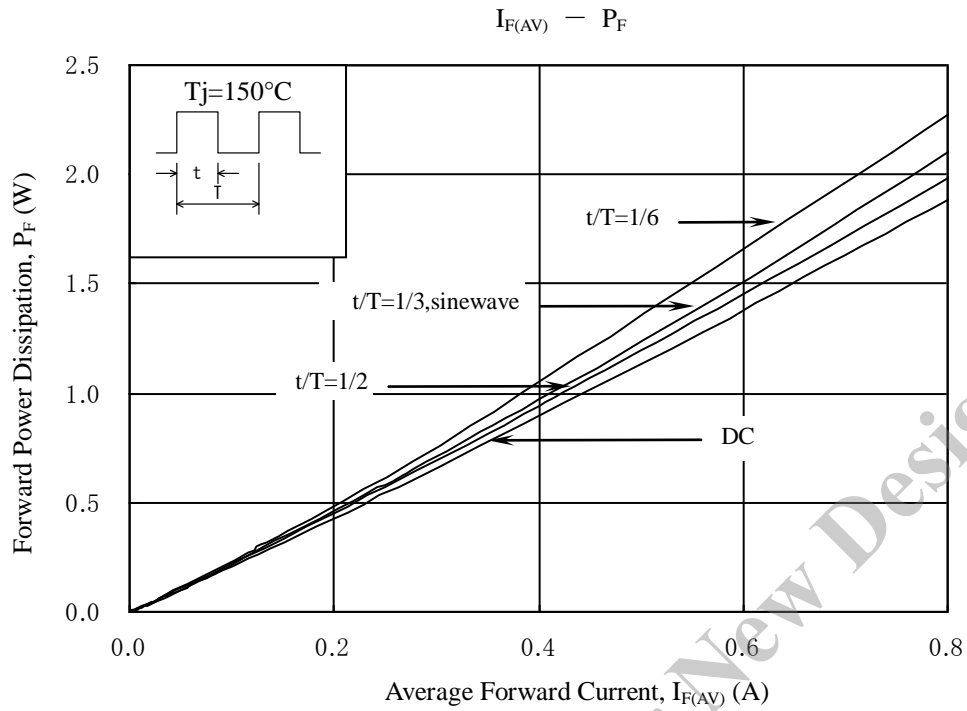
4 Absolute maximum ratings

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	0.7	Refer to derating curve in Section 7
4	Peak Surge Forward Current	I_{FSM}	A	30	10ms. Half sine wave, one shot
5	I^2t Limiting Value	I^2t	A^2s	4.5	$1ms \leq t \leq 10ms$
6	Junction Temperature	T_j	$^{\circ}C$	-40 to +150	
7	Storage Temperature	T_{stg}	$^{\circ}C$	-40 to +150	

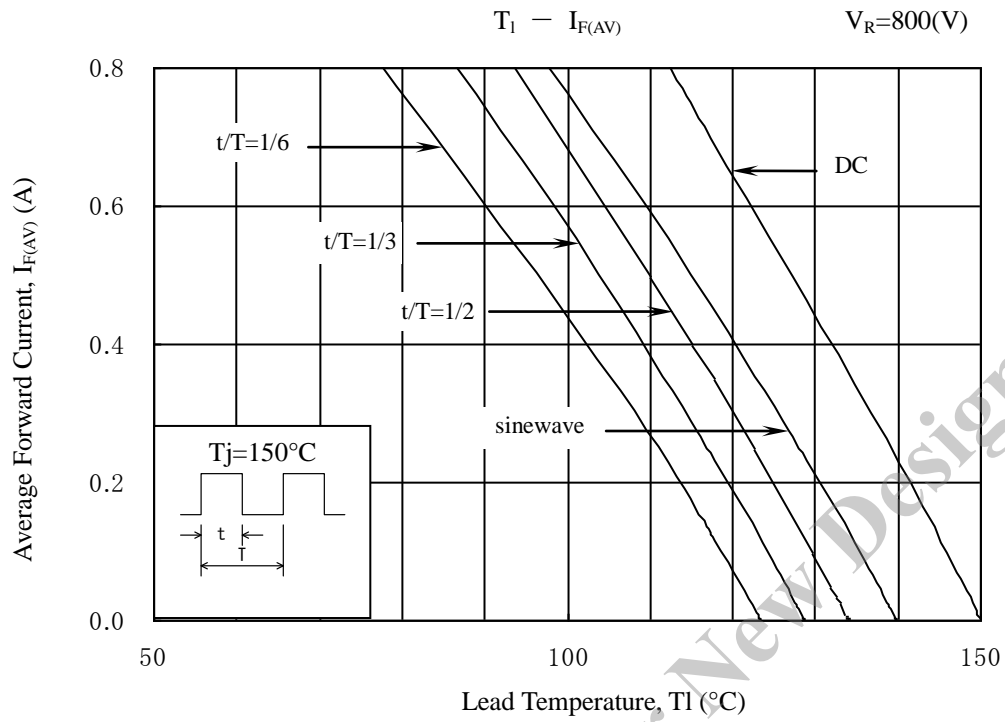
5 Electrical characteristics ($T_a=25^{\circ}C$, unless otherwise specified)

No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	2.5 max.	$I_F=0.8A$
2	Reverse Leakage Current	I_R	μA	10 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	2.0 max.	$V_R=V_{RM}, T_j=150^{\circ}C$
4	Reverse Recovery Time	T_{rr1}	μs	1.5 max.	$I_F=I_{RP}=10mA$ 90% Recovery point, $T_j=25^{\circ}C$
		T_{rr2}	μs	0.6 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 Characteristics



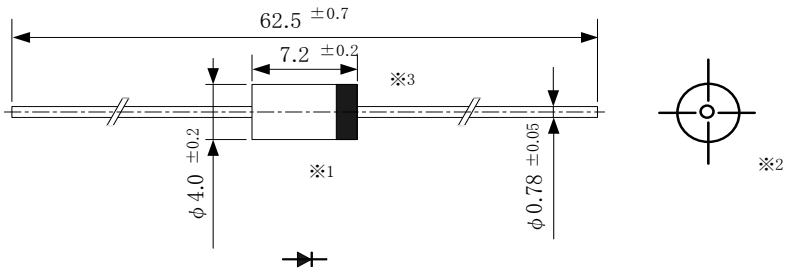
7 Derating



Not Recommended for New Designs

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 0.2mm(max.)
- *3 The burr may exit up to 2mm from the body of lead

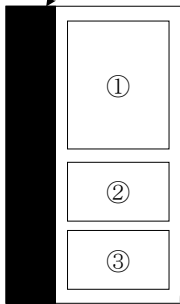
8-2 Appearance

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

8-3 Marking

- ① Type number RS1B is abbreviated as RS1B
- 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

Cathode Mark



Not Recommended for New Designs