



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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## 1 Scope

The present specifications shall apply to an RS1A.

## 2 Outline

Type	Silicon Diode
Structure	Resin Molded
Applications	High Frequency Rectification

## 3 Flammability

UL94V-0(Equivalent)

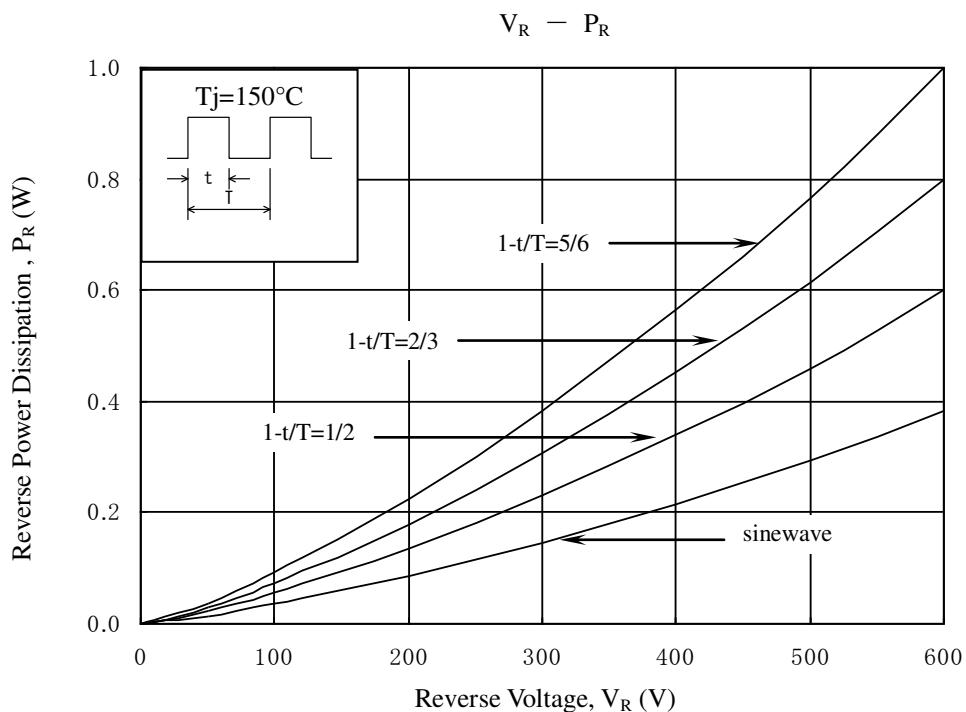
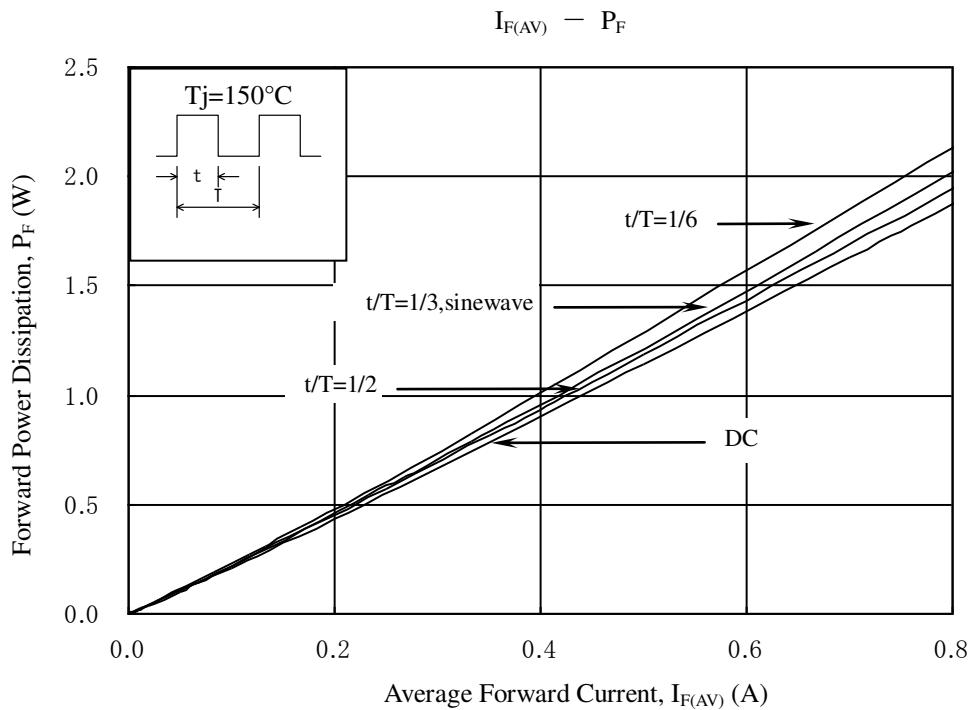
## 4 Absolute maximum ratings

No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	$V_{RSM}$	V	650	
2	Peak Reverse Voltage	$V_{RM}$	V	600	
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 $\leq$ $\leq$ 10ms
6	Junction Temperature	$T_j$	°C	-40 to +150	
7	Storage Temperature	$T_{stg}$	°C	-40 to +150	

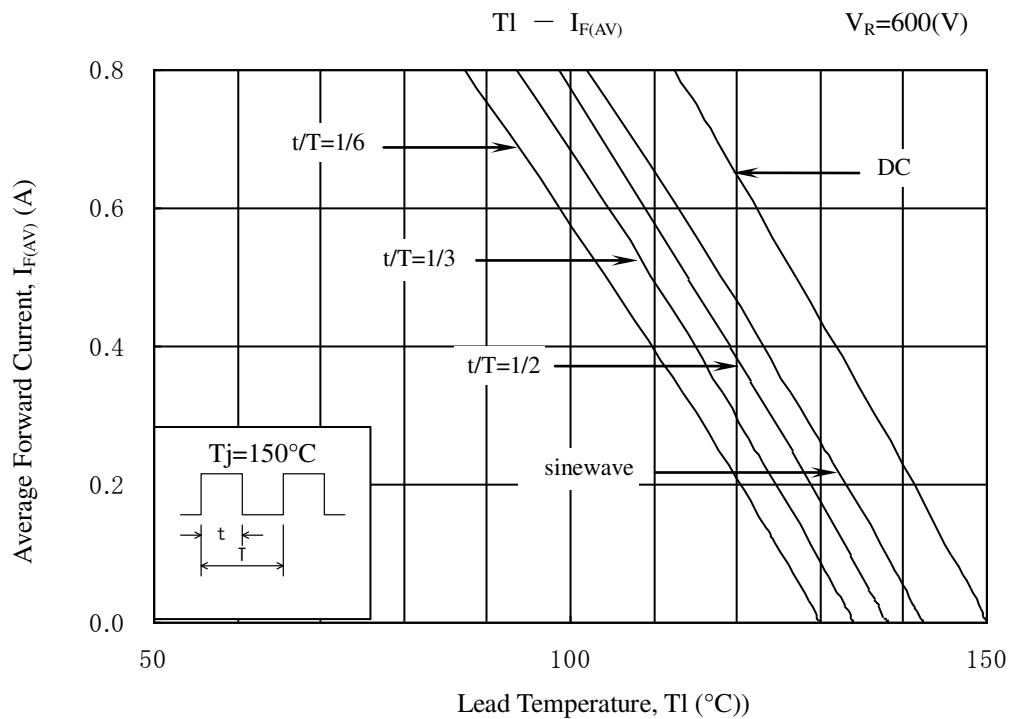
## 5 Electrical characteristics (Ta=25°C, unless otherwise specified)

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

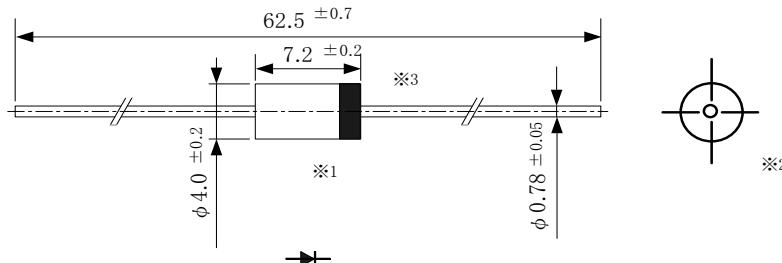


## 7 Derating



## 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 RS1A is abbreviated as RS1A

(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

