## 1 Scope

The present specifications shall apply to a RS4FS.

## 2 Outline

Туре	Silicon Diode (Mesa Type)		
Structure	Resin Molded	Flammability:UL94-V0 (Equivalent)	
Applications	Damper Circuit		

# 3 Absolute maximum ratings

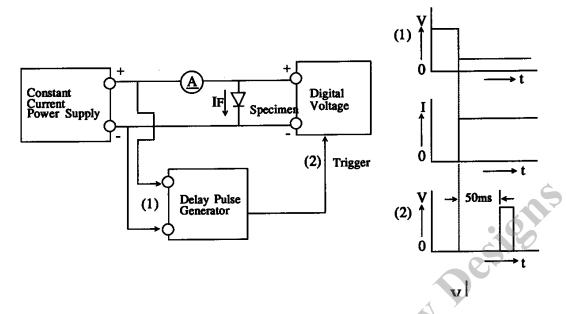
No.	Item	Symbol	Unit	Rating	Conditions	
1	Transient Peak Reverse Voltage	V <sub>RSM</sub>	V	1500	9	
2	Peak Reverse Voltage	$V_{RM}$	V	1500		
3	Average Forward Current	$I_{F(AV)}$	A	1.5 (Ta=60°C)	Without heatsink	Refer to derating
				2.5 (Ta=60°C)	With heatsink	curve in Section 6
4	Peak Surge Forward Current	$I_{FSM}$	A	50	10ms. Half sine wave, one shot	
5	Junction Temperature	T <sub>j</sub>	°C	-40 to +150		
6	Storage Temperature	T <sub>stg</sub>	°C	-40 to +150		

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

No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	$V_{F}$	V	1.50 max.	I <sub>F</sub> =3.0A
2	Reverse Leakage Current	$I_R$	μA	50 max.	$V_R = V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	μΑ	500 max.	$V_R=V_{RM}, T_j=100^{\circ}C$
4 Reverse Recovery	Reverse Recovery Time	trr-1	μs	1.0 max.	I <sub>F</sub> =I <sub>RP</sub> =100mA 90% Recovery point, T <sub>j</sub> =25°C
	Reverse Recovery Time	trr-2	μs	0.4 max.	I <sub>F</sub> =0.1A, I <sub>RP</sub> =0.2A, 75% Recovery point ,T <sub>j</sub> =25°C
5	Thermal Resistance	Rth (j-l)	°C/W	8 max.	Between Junction and Lead

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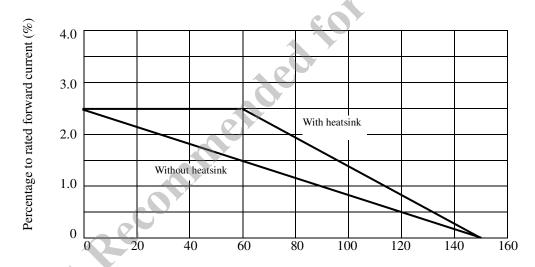
# $5~V_F$ test and test circuit



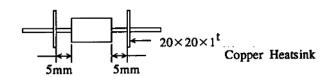
## 6 Derating

Derating to the ambient temperature.

Power loss generated by voltage is not taken into consideration.

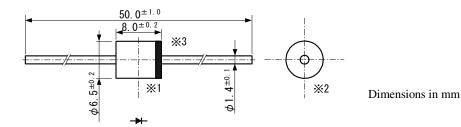


Ambient temperature Ta (°C)



#### 7 Package information

#### 7-1 Package type, physical dimensions and material

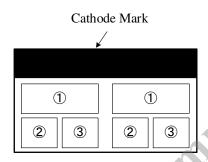


- \*1 Wire diameter of lead tips is \phi1.55mm(max.)
- \*2 The allowance position of body against the center of whole lead wire is 0.5mm (max.)
- \*3 The centric allowance of lead wire against center of physical body is 0.3mm (max.)
- \*4 The burr may exit up to 2mm from the body of lead

# 7-2 Appearance

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

## 7-3 Marking



The Type number and Lot number are to be marked in Yellow.

- ① Type number: RS4FS
- 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