## 1. Scope

The present specifications shall apply to a RU4DS.

#### 2. Outline

Туре	Silicon Diode	
Structure	Resin Molded	Flammability:UL94-V0(Equivalent)
Applications	High Frequency Rectification, etc.	

## 3. Absolute maximum ratings

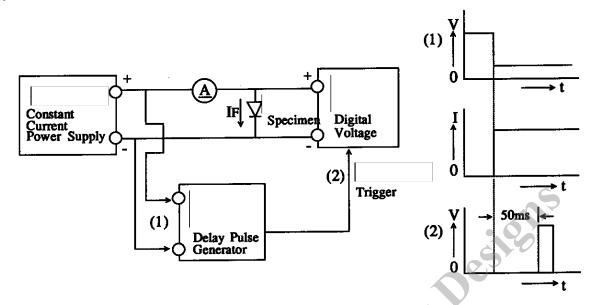
No.	Item	Symbol	Unit	Rating	Conditions	
1	1 Transient Peak Reverse Voltage		V	1350		
2	2 Peak Reverse Voltage		V	1300		
3	Average Forward Current	I <sub>F(AV)</sub>	A	1.5 (Ta=60°C)	With out Fin	Refer to 6
				2.5 (Ta=60°C)	With Fin	
4	Peak Surge Forward Current I <sub>FSM</sub> A		50	10msec. Half sinewave, one shot		
5	Junction Temperature	T <sub>j</sub>	°C	-40 ∼ +150		
6	6 Storage Temperature		°C	-40 ∼ +150		

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

No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	$V_{\rm F}$	V	1.80 max.	I <sub>F</sub> =3.0A
2	Reverse Leakage Current	$I_R$	μΑ	50 max.	$V_R = V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	μΑ	500 max.	$V_R=V_{RM}, T_j=100$ °C
4 Reverse R	Reverse Recovery Time	Trr-1	μs	0.4 max.	$I_F=I_{RP}=0.1A$ , Ta=25°C 90% Recovery point
	Reverse Recovery Time	Trr-2	μs	0.18 max.	I <sub>F</sub> =0.1A, I <sub>RP</sub> =0.2A, Ta=25°C 75% Recovery point
5	Thermal Resistance	Rth(j-l)	°C/W	8 max.	Between Junction and Lead

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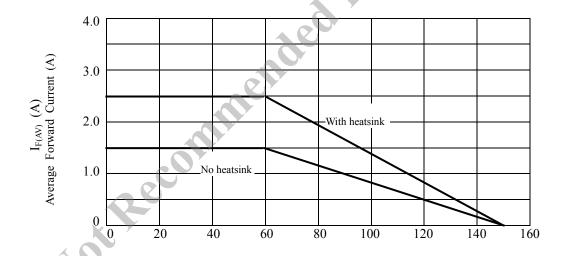
## $5.V_F$ test and test circuit



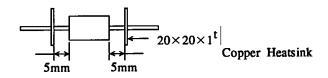
### 6. Derating

Derating to the ambient temperature.

Power loss generated by voltage is not taken into consideration.

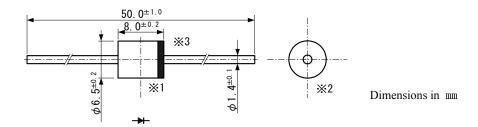


Ambient temperature Ta (°C)



# 7. Package information

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



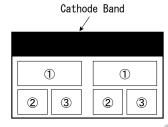
- \*1 Wire diameter of lead tips is \( \phi 1.55 \text{mm} \text{(max.)} \)
- \*2 The allowance position of body against the center of whole lead wire is 0.5mm (max.)
- \*3 The centric allowance of lead wire against center of physical body is 0.3mm (max.)
- \*4 The burr may exit up to 2mm from the body of lead

## 7-2 Appearance

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

## 7-3 Marking

① Type number RU4DS



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

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