

## 1 Scope

The present specifications shall apply to an RM10A.

## 2 Outline

|              |                                    |
|--------------|------------------------------------|
| Type         | Silicon Diode                      |
| Structure    | Resin Molded                       |
| Applications | Commercial Frequency Rectification |

## 3 Flammability

UL94V-0(Equivalent)

## 4 Absolute maximum ratings

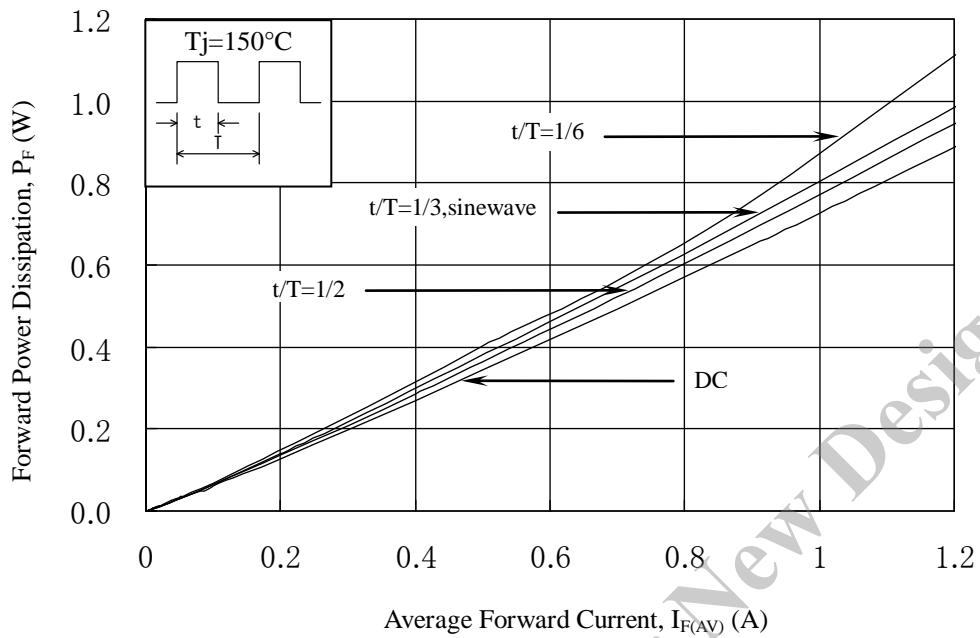
| No. | Item                            | Symbol             | Unit             | Rating      | Conditions                           |
|-----|---------------------------------|--------------------|------------------|-------------|--------------------------------------|
| 1   | Transient Peak Reverse Voltage  | V <sub>RSM</sub>   | V                | 600         |                                      |
| 2   | Peak Reverse Voltage            | V <sub>RM</sub>    | V                | 600         |                                      |
| 3   | Average Forward Current         | I <sub>F(AV)</sub> | A                | 1.2         | Refer to derating curve in Section 7 |
| 4   | Peak Surge Forward Current      | I <sub>FSM</sub>   | A                | 150         | 10ms.<br>Half sine wave, one shot    |
| 5   | I <sup>2</sup> t Limiting Value | I <sup>2</sup> t   | A <sup>2</sup> s | 112.5       | 1ms ≤ t ≤ 10ms                       |
| 6   | Junction Temperature            | T <sub>j</sub>     | °C               | -40 to +150 |                                      |
| 7   | Storage Temperature             | T <sub>stg</sub>   | °C               | -40 to +150 |                                      |

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

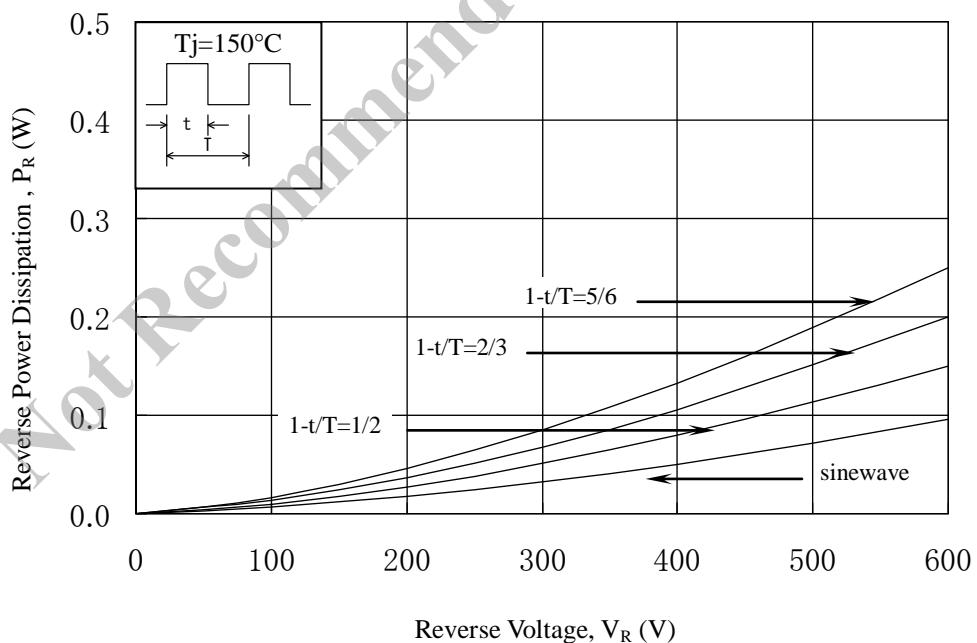
| No. | Item   | Symbol               | Unit | Rating    | Conditions  |
|-----|--|----------------------|------|-----------|---|
| 1   | Forward Voltage Drop                           | V <sub>F</sub>       | V    | 0.91 max. | I <sub>F</sub> =1.5A                                    |
| 2   | Reverse Leakage Current                        | I <sub>R</sub>       | µA   | 10 max.   | V <sub>R</sub> =V <sub>RM</sub>                         |
| 3   | Reverse Leakage Current Under High Temperature | H·I <sub>R</sub>     | µA   | 50 max.   | V <sub>R</sub> =V <sub>RM</sub> , T <sub>j</sub> =100°C |
| 4   | Thermal Resistance                             | R <sub>th(j-l)</sub> | °C/W | 15 max.   | Between Junction and Lead                               |

## 6 Characteristics

$$I_{F(AV)} = P_F$$

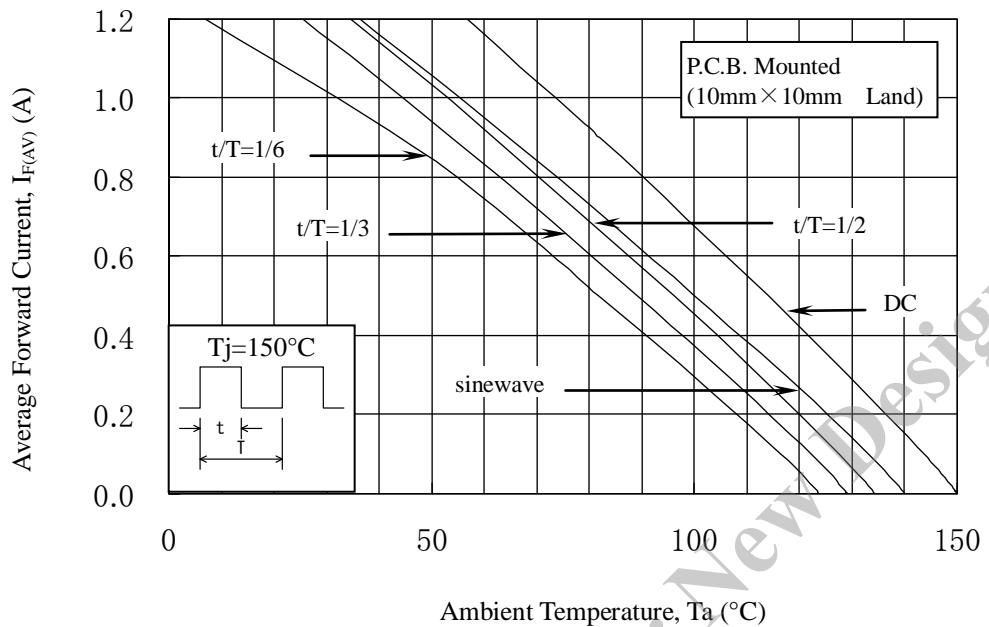


$$V_R = P_R$$



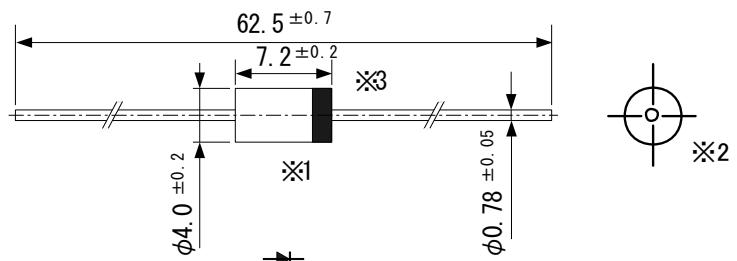
## 7 Derating

$$T_a = I_{F(AV)}$$



## 8 Package information

### 8-1 Package type, physical dimensions and material



\*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

Dimensions in mm

### 8-2 Appearance

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

### 8-3 Marking

- ① Type number : RM10A
- 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

