

## 1 Scope

The present specifications shall apply to an RP1H.

## 2 Outline

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

## 3 Flammability

UL94V-0(Equivalent)

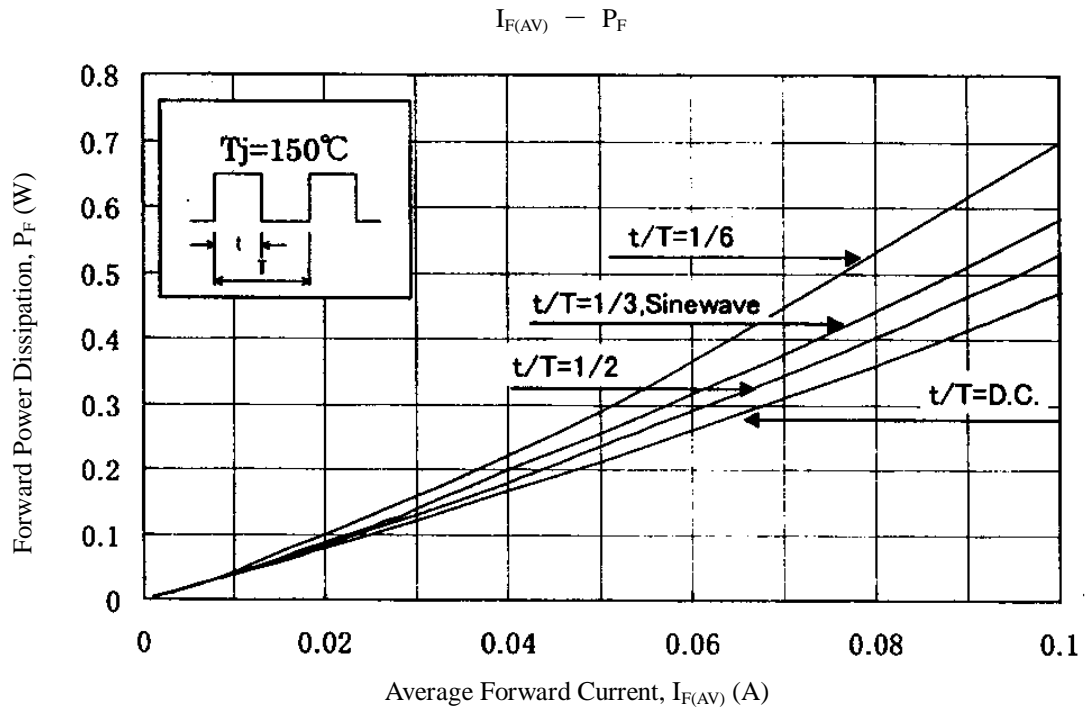
## 4 Absolute maximum ratings

| No. | Item                           | Symbol      | Unit        | Rating      | Conditions                           |
|-----|--------------------------------|-------------|-------------|-------------|--------------------------------------|
| 1   | Transient Peak Reverse Voltage | $V_{RSM}$   | V           | 2000        |                                      |
| 2   | Peak Reverse Voltage           | $V_{RM}$    | V           | 2000        |                                      |
| 3   | Average Forward Current        | $I_{F(AV)}$ | A           | 0.1         | Refer to derating curve in Section 7 |
| 4   | Peak Surge Forward Current     | $I_{FSM}$   | A           | 5           | 10ms.<br>Half sine wave, one shot    |
| 5   | $I^2t$ Limiting Value          | $I^2t$      | $A^2s$      | 0.125       | $1ms \leq t \leq 10ms$               |
| 6   | Junction Temperature           | $T_j$       | $^{\circ}C$ | -40 to +150 |                                      |
| 7   | Storage Temperature            | $T_{stg}$   | $^{\circ}C$ | -40 to +150 |                                      |

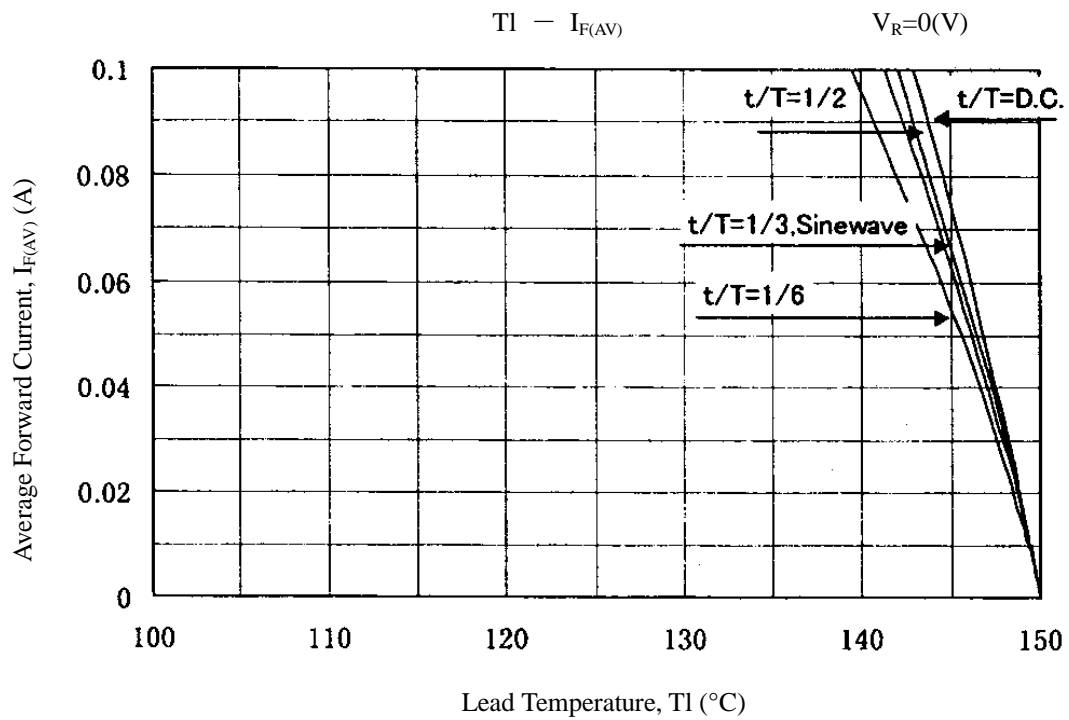
5 Electrical characteristics ( $T_a=25^{\circ}C$ , unless otherwise specified)

| No. | Item   | Symbol        | Unit          | Rating   | Conditions   |
|-----|--|---------------|---------------|----------|--|
| 1   | Forward Voltage Drop                           | $V_F$         | V             | 7.0 max. | $I_F=0.1A$   |
| 2   | Reverse Leakage Current                        | $I_R$         | $\mu A$       | 2.0 max. | $V_R=V_{RM}$   |
| 3   | Reverse Leakage Current Under High Temperature | $H \cdot I_R$ | $\mu A$       | 10 max.  | $V_R=V_{RM}, T_j=100^{\circ}C$                                     |
| 4   | Reverse Recovery Time                          | trr1          | ns            | 100 max. | $I_F=I_{RP}=100mA$<br>90% Recovery point, $T_j=25^{\circ}C$        |
|     |  | trr2          | ns            | 50 max.  | $I_F=100mA, I_{RP}=200mA$<br>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

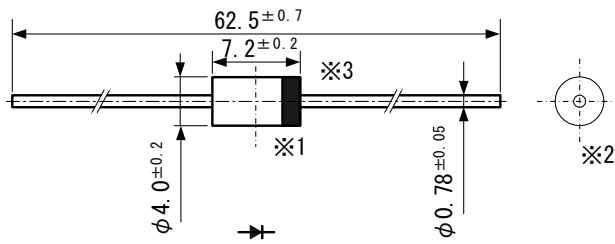


7 Derating



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      RP1H
- 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

