

## 1. Scope

The present specifications shall apply to an RN1Z.

## 2. Outline

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

## 3. Flammability

UL94V-0(Equivalent)

Not Recommended for New Designs

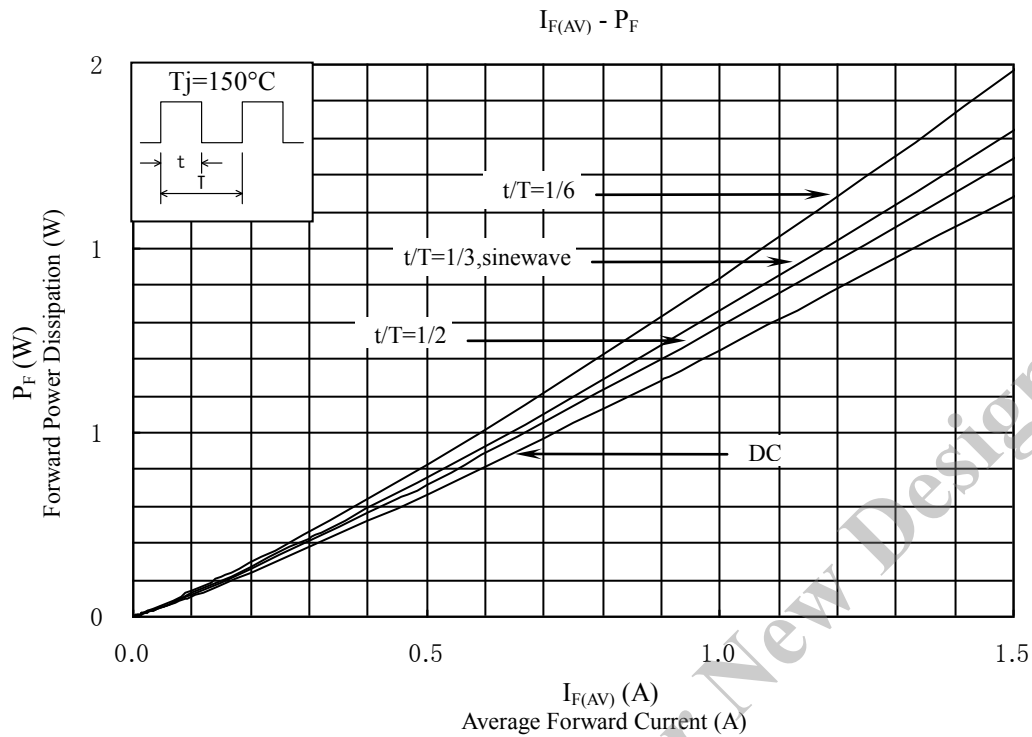
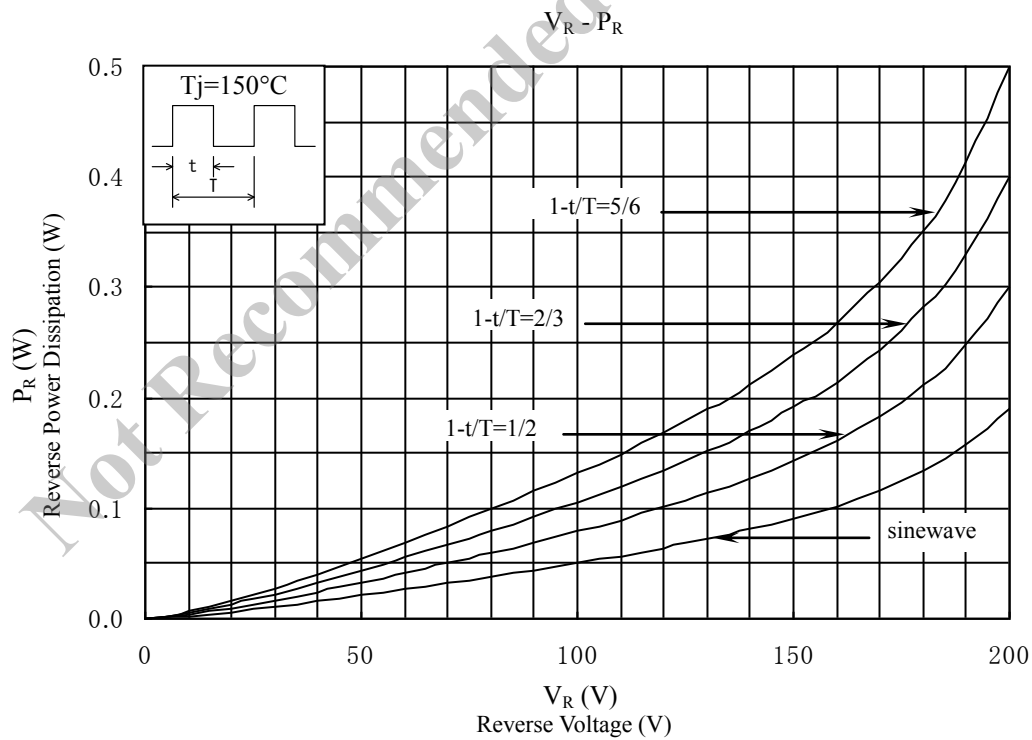
## 4. Absolute maximum ratings

| No. | Item                           | Symbol      | Unit        | Rating   | Conditions                         |
|-----|--------------------------------|-------------|-------------|----------|------------------------------------|
| 1   | Transient Peak Reverse Voltage | $V_{RSM}$   | V           | 200      |                                    |
| 2   | Peak Reverse Voltage           | $V_{RM}$    | V           | 200      |                                    |
| 3   | Average Forward Current        | $I_{F(AV)}$ | A           | 1.5      | Refer to Derating of 7             |
| 4   | Peak Surge Forward Current     | $I_{FSM}$   | A           | 60       | 10msec.<br>Half sinewave, one shot |
| 5   | $I^2t$ Limiting Value          | $I^2t$      | $A^2s$      | 18       | $1msec \leq t \leq 10msec$         |
| 6   | Junction Temperature           | $T_j$       | $^{\circ}C$ | -40~+150 |                                    |
| 7   | Storage Temperature            | $T_{stg}$   | $^{\circ}C$ | -40~+150 |                                    |

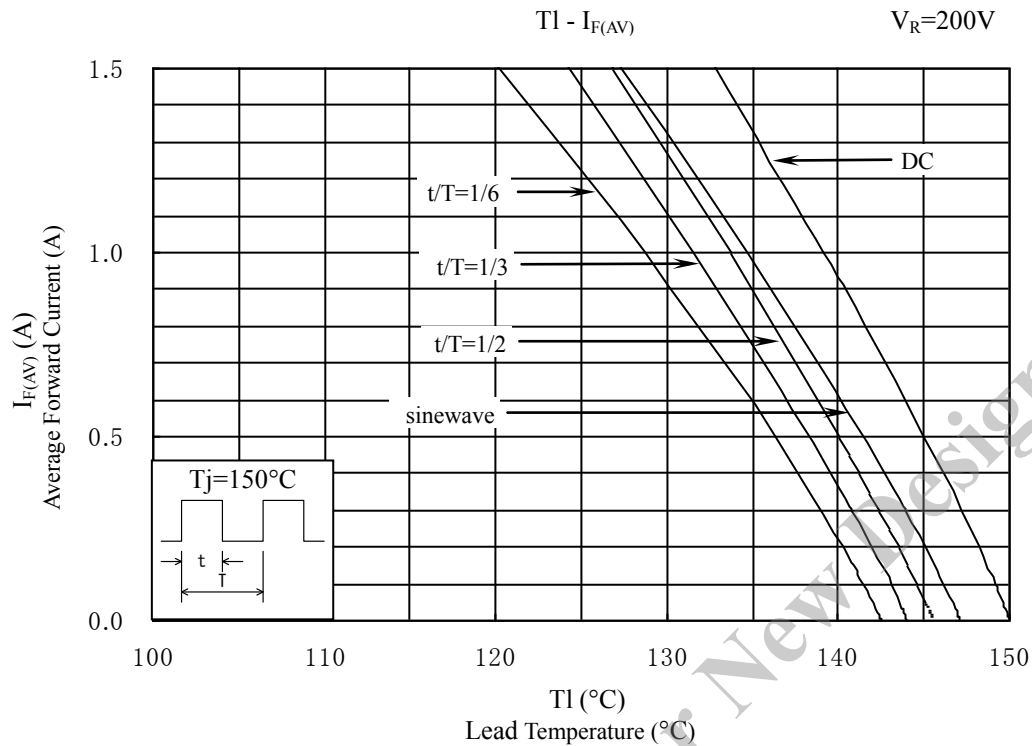
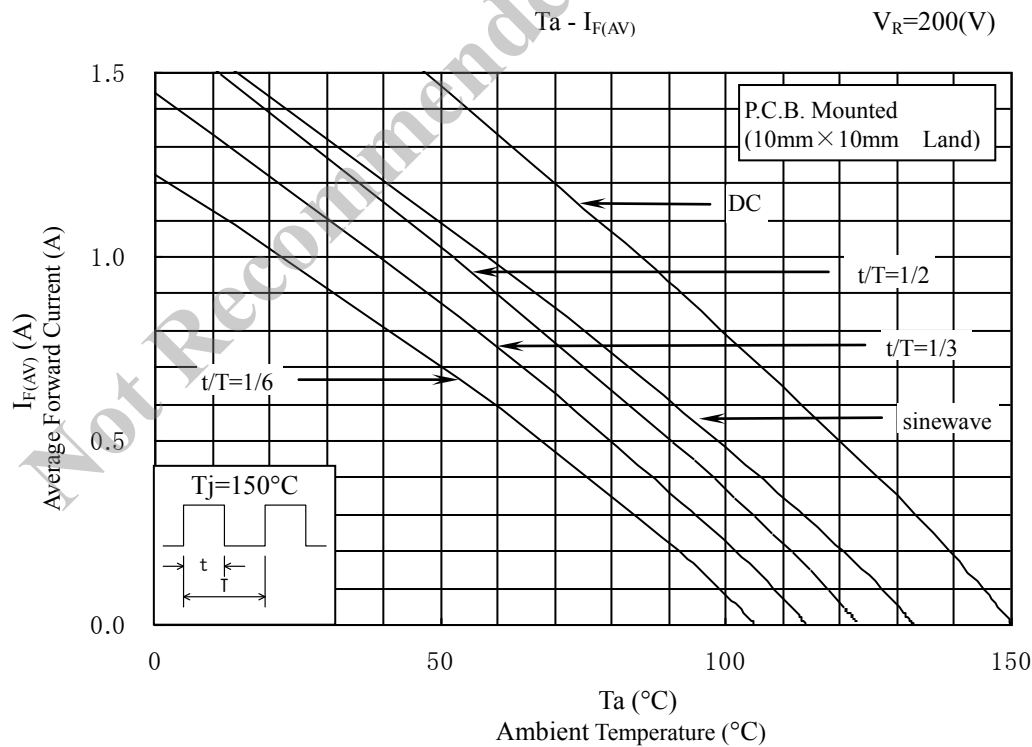
5. Electrical characteristics ( $T_a=25^{\circ}C$  , unless otherwise specified)

| No. | Item                                           | Symbol        | Unit          | Value     | Conditions                                                            |
|-----|------------------------------------------------|---------------|---------------|-----------|-----------------------------------------------------------------------|
| 1   | Forward Voltage Drop                           | $V_F$         | V             | 0.92 max. | $I_F=1.5A$                                                            |
| 2   | Reverse Leakage Current                        | $I_R$         | $\mu A$       | 20 max.   | $V_R=V_{RM}$                                                          |
| 3   | Reverse Leakage Current Under High Temperature | $H \cdot I_R$ | mA            | 3.0 max.  | $V_R=V_{RM}$ , $T_j=150^{\circ}C$                                     |
| 4   | Reverse Leakage Current Under High Temperature | trr-1         | ns            | 100 max.  | $I_F=I_{RP}=100mA$<br>90% Recovery point, $T_j=25^{\circ}C$           |
|     |                                                | trr-2         | 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

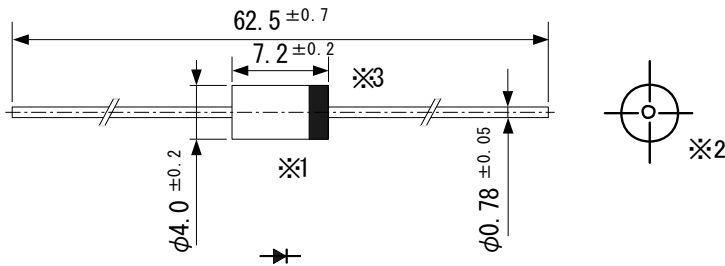


7. Derating



8. Package information

8-1 Package type, physical dimensions and material



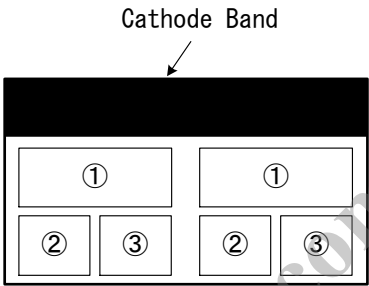
- \*1 The allowance position of Body against the center of whole lead wire is 0.5mm(max.)
- \*2 The centric allowance of lead wire against center of physical body is 0.3mm(max.)
- \*3 The burr may exit up to 2mm from the body of lead

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 : RN1Z
- 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