1. Scope

The present specifications shall apply to an RK49.

2. Outline

High Frequency Rectification

| | |
|---|---|
| Type | Silicon Schottky Barrier 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 | 90 | |
| 2 | Peak Reverse Voltage | $V_{RM}$ | V | 90 | |
| 3 | Average Forward Current | $I_{F(AV)}$ | A | 3.5 | 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≤t≤10msec |
| 6 | Junction Temperature | $T_j$ | °C | -40~+150 | |
| 7 | Storage Temperature | $T_{stg}$ | °C | -40~+150 | |

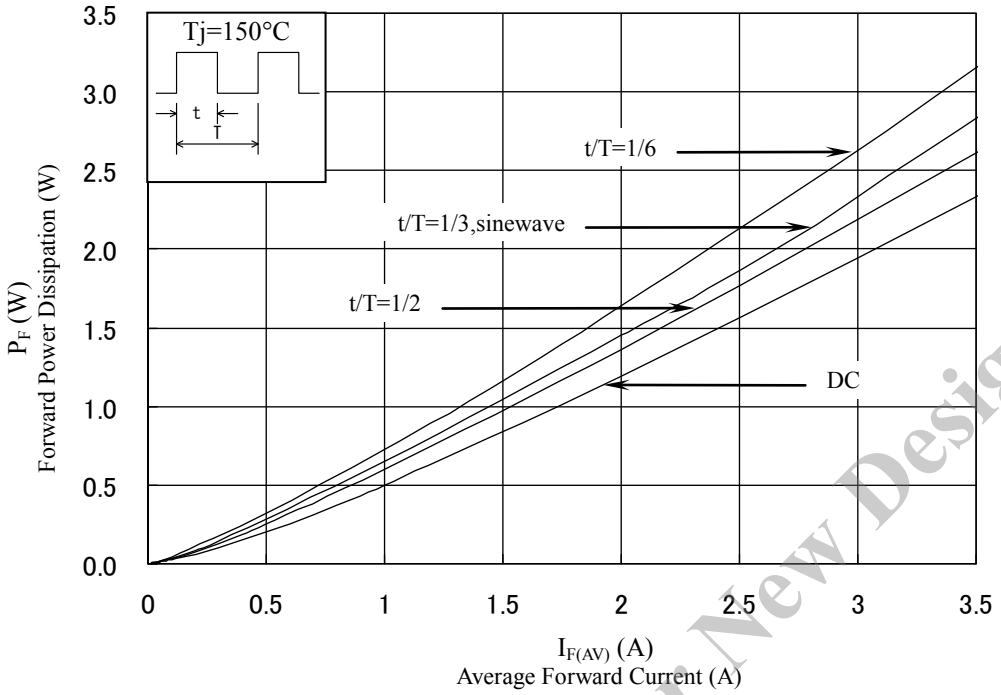
5. Electrical characteristics

| No. | Item | Symbol | Unit | Value | Conditions |
|---|---|---|---|---|---|
| 1 | Forward Voltage Drop | $V_F$ | V | 0.81 max. | $I_F$=3.5A |
| 2 | Reverse Leakage Current | $I_R$ | mA | 5.0 max. | $V_R=V_{RM}$ |
| 3 | Reverse Leakage Current Under High Temperature | H・$I_{R1}$ | mA | 35 max. | $V_R=V_{RM}$, $T_j$=125°C |
| | | H・$I_{R2}$ | mA | 125 max. | $V_R=V_{RM}$, $T_j$=150°C |
| 4 | Thermal Resistance | $R_{th(j-l)}$ | °C /W | 8.0 max. | Between Junction and Lead |

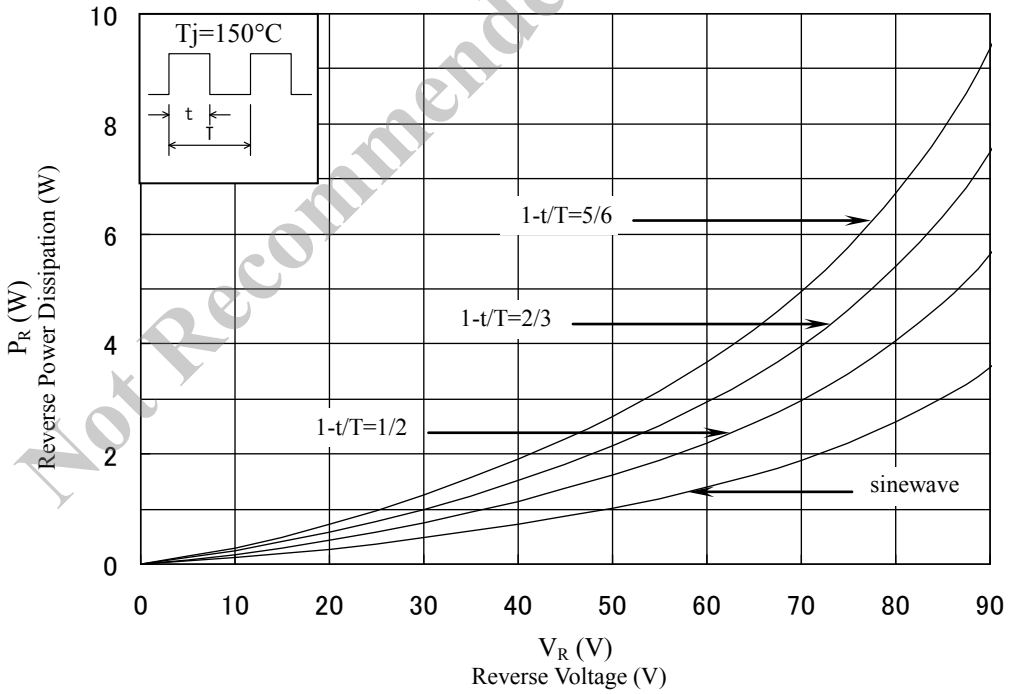
Not Recommended for New Designs

6. Characteristics

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



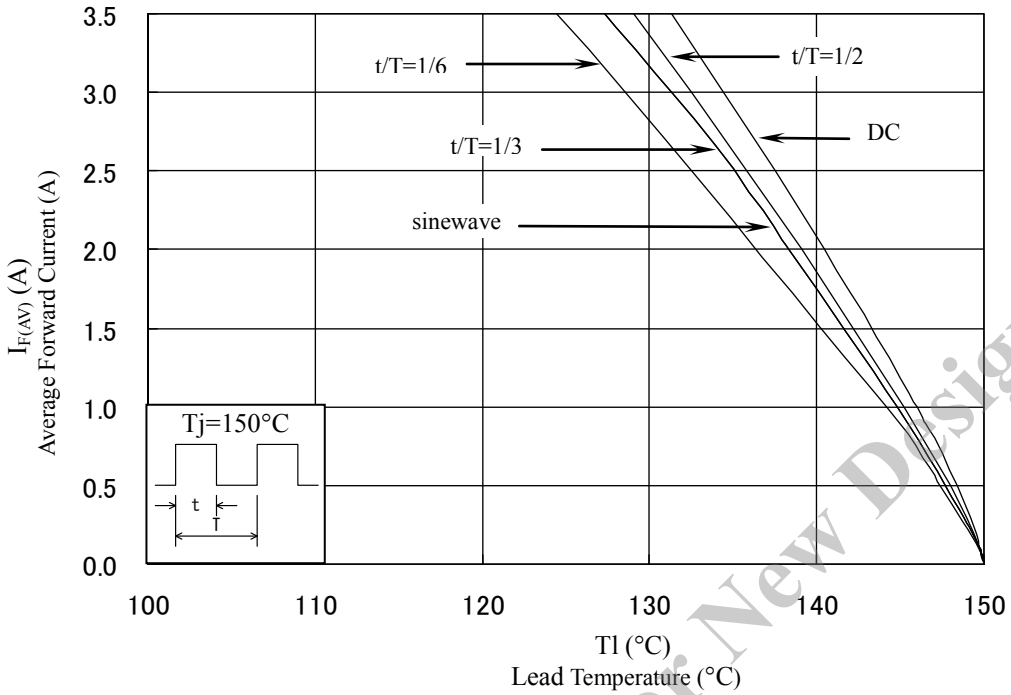

$V_R$ - $P_R$



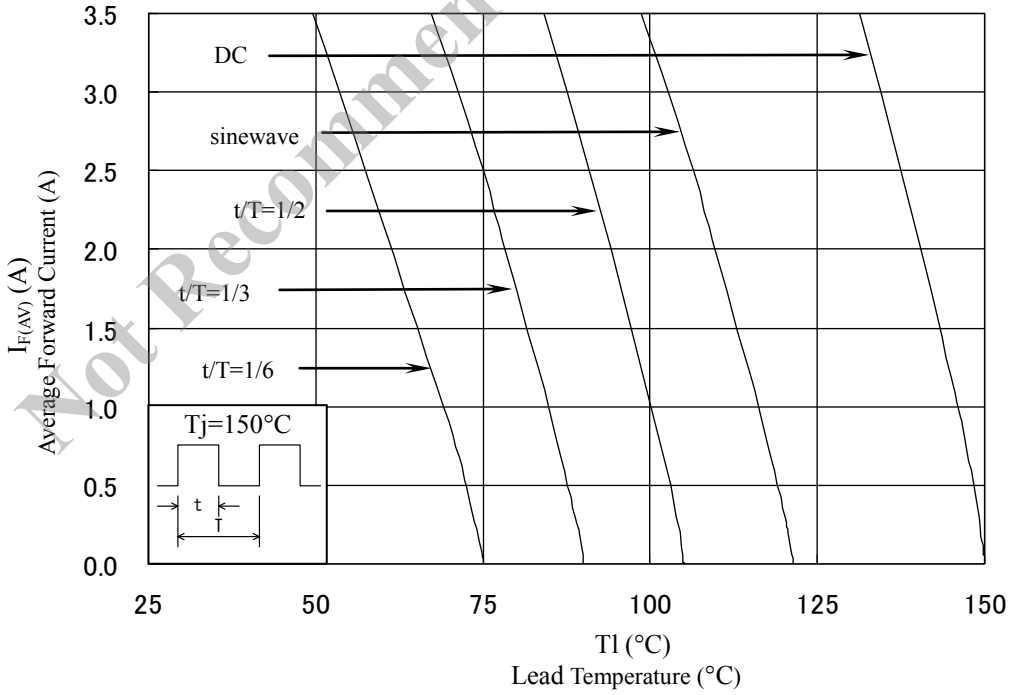

Not Recommended for New Designs

7. Derating

Tl - $I_{F(AV)}$ $V_R$=0(V)



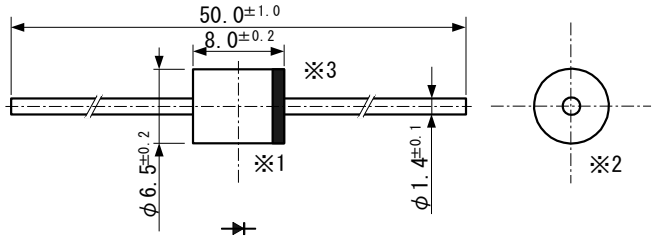

Tl - $I_{F(AV)}$ $V_R$=90(V)




Not Recommended for New Designs

8. Package information

8-1 Package type, physical dimensions and material



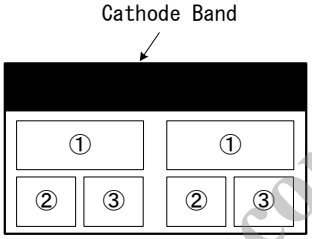

*1 The allowance position of Body against the center of whole lead wire is 0.5mm(max.)
*2 The centric allowance of lead wire against center of physical body is 0.3mm(max.)
*3 The burr may exit up to 2mm from the body of lead

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 RK49

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

Not Recommended for New Designs