

1. Scope

The present specifications shall apply to an FMB-G14L.

2. Outline

High Frequency Rectification

| | |
|--------------|--|
| Type | Silicon Schottky Barrier Diode |
| Structure | Resin Molded Flammability : UL94V-0 (Equivalent) |
| Applications | High Frequency Rectification |

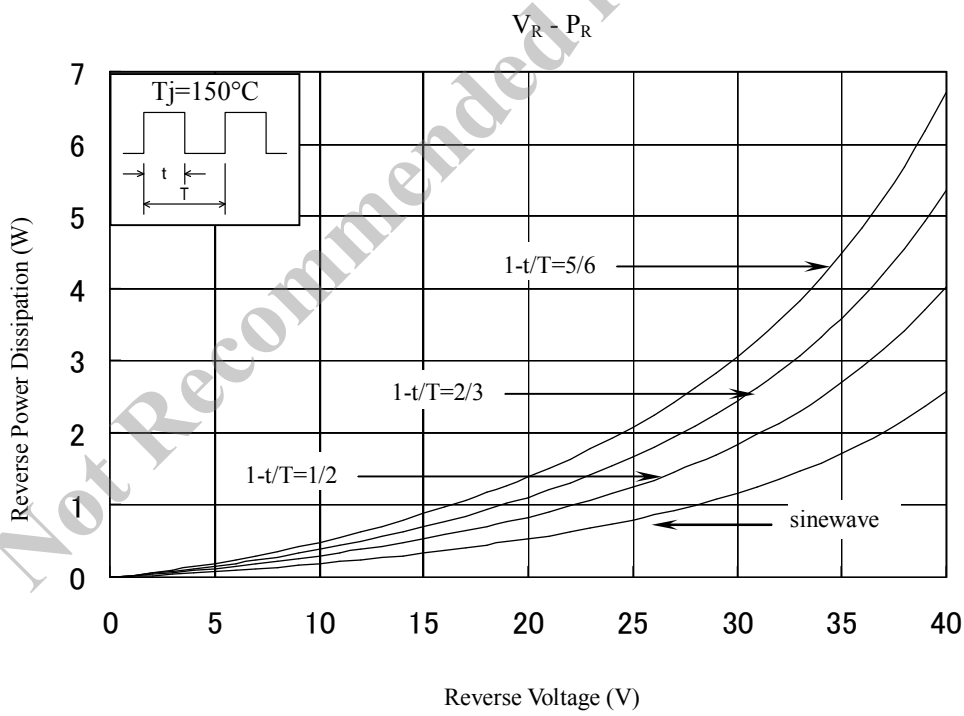
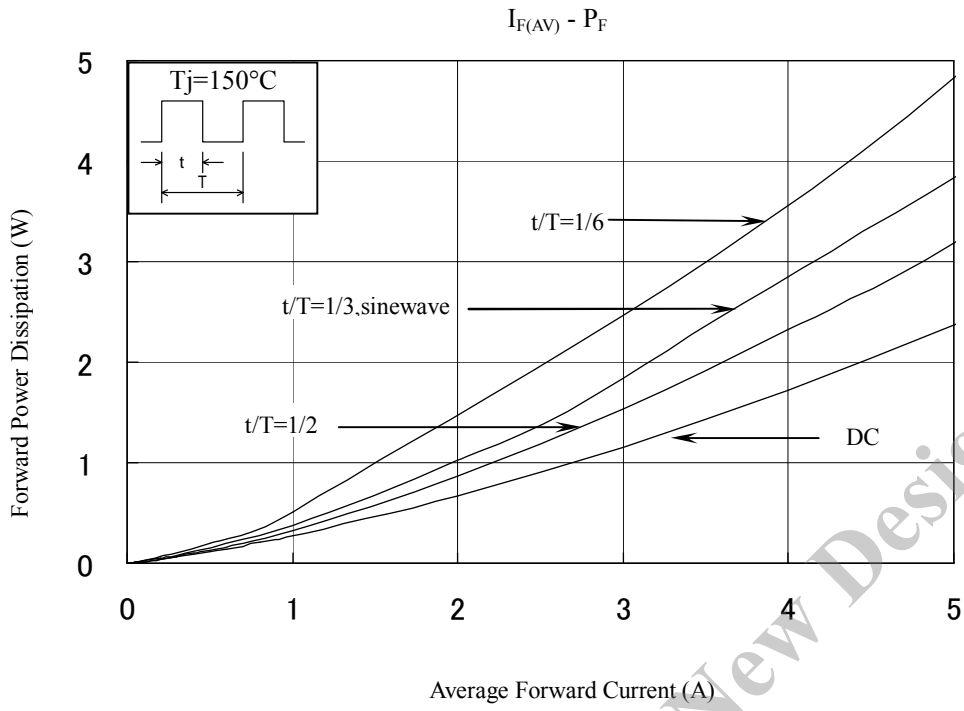
3. Absolute maximum ratings

| No. | Item | Symbol | Unit | Rating | Conditions |
|-----|--------------------------------|-------------|-------------|------------|----------------------------|
| 1 | Transient Peak Reverse Voltage | V_{RSM} | V | 45 | |
| 2 | Peak Reverse Voltage | V_{RM} | V | 40 | |
| 3 | Average Forward Current | $I_{F(AV)}$ | A | 5.0 | Refer Derating of 6 |
| 4 | Peak Surge Forward Current | I_{FSM} | A | 60 | 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 | |

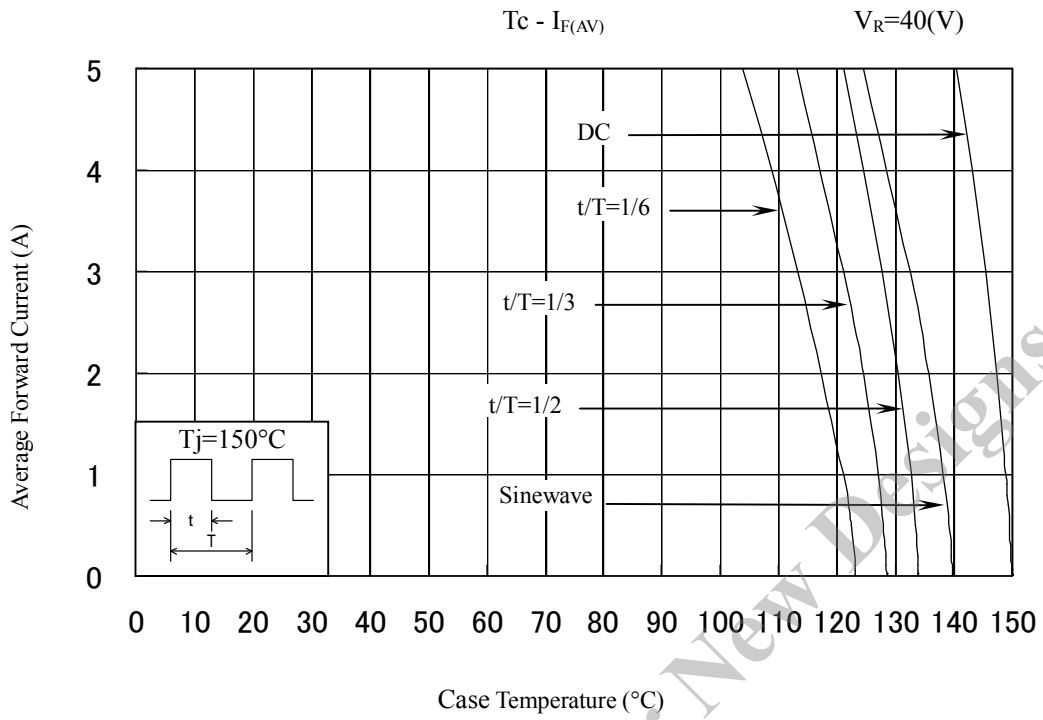
4. Electrical characteristics

| No. | Item | Symbol | Unit | Value | Conditions |
|-----|--|------------------|---------------|-----------|--------------------------------|
| 1 | Forward Voltage Drop | V_F | V | 0.55 max. | $I_F=5.0A$ |
| 2 | Reverse Leakage Current | I_R | mA | 5.0 max. | $V_R=V_{RM}$ |
| 3 | Reverse Leakage Current Under High Temperature | $H \cdot I_{R1}$ | mA | 50 max. | $V_R=V_{RM}, T_j=125^{\circ}C$ |
| | | $H \cdot I_{R2}$ | mA | 175 max. | $V_R=V_{RM}, T_j=150^{\circ}C$ |
| 4 | Thermal Resistance | $R_{th(j-c)}$ | $^{\circ}C/W$ | 4.0 max. | Between Junction and case |

5. Characteristics



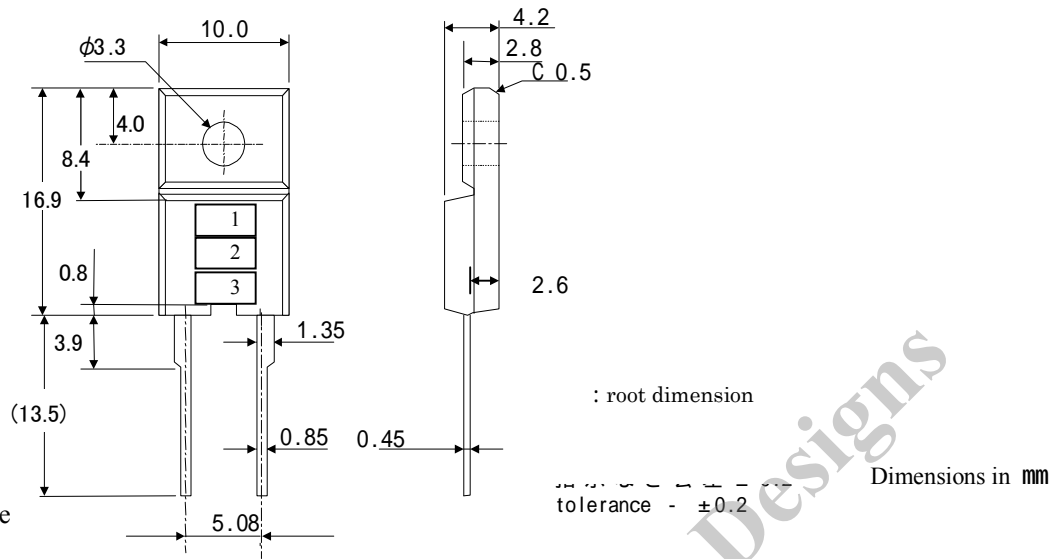
6. Derating



Not Recommended for New Designs

7. Package information

7-1 Package type, physical dimensions and material



7-2 Appearance

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

7-3 Marking

| Type Name | Marking | | |
|-----------|------------------|-----------------|--|
| | * 1 Type Name | * 2 Polarity | * 3 Lot number |
| FMB-G14L | FMBG14 | L | 1st letter: Last digit of year 2nd letter: Month From 1 to 9 for Jan. to Sep., O for Oct., N for Nov., D for Dec. 3rd & 4th letter: Day ex. 4130 (Jan. 30, 2004) |