

1 Scope

The present specifications shall apply to an EM2.

2 Outline

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

3 Flammability

UL94V-0(Equivalent)

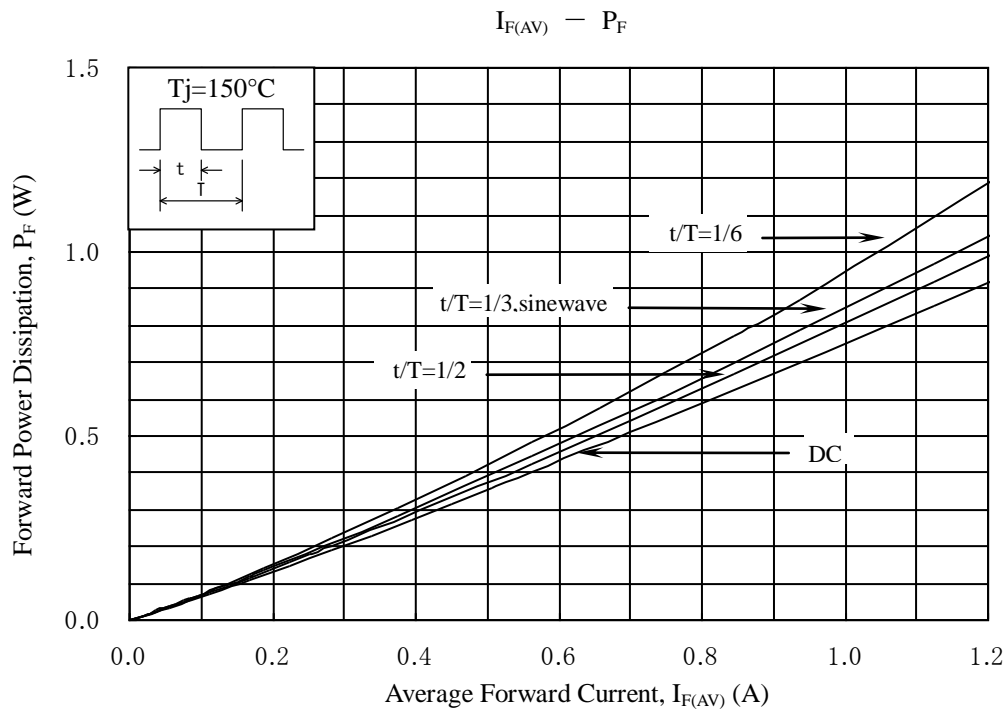
4 Absolute maximum ratings

| No. | Item | Symbol | Unit | Rating | Conditions |
|-----|--------------------------------|-------------|--------|-------------|--------------------------------------|
| 1 | Transient Peak Reverse Voltage | V_{RSM} | V | 450 | |
| 2 | Peak Reverse Voltage | V_{RM} | V | 400 | |
| 3 | Average Forward Current | $I_{F(AV)}$ | A | 1.2 | Refer to derating curve in Section 7 |
| 4 | Peak Surge Forward Current | I_{FSM} | A | 80 | 10ms. Half sine wave, one shot |
| 5 | I^2t Limiting Value | I^2t | A^2s | 32 | $1ms \leq t \leq 10ms$ |
| 6 | Junction Temperature | T_j | °C | -40 to +150 | |
| 7 | Storage Temperature | T_{stg} | °C | -40 to +150 | |

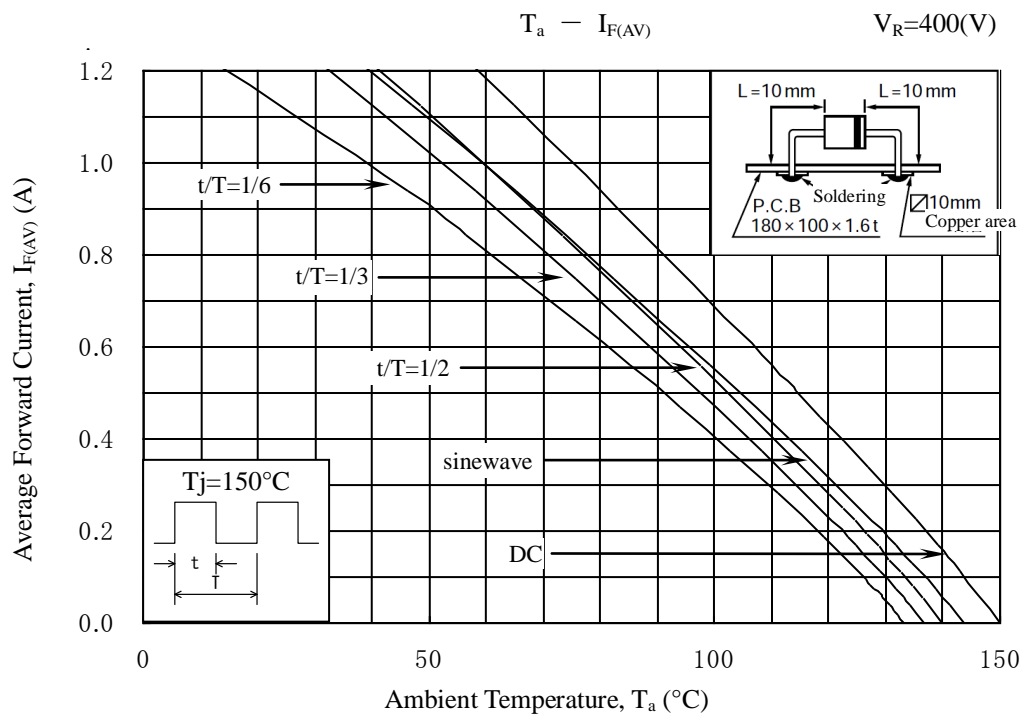
5 Electrical characteristics ($T_a=25^\circ\text{C}$, unless otherwise specified)

| No. | Item | Symbol | Unit | Rating | Conditions |
|-----|--|------------------|---------|-----------|-------------------------------------|
| 1 | Forward Voltage Drop | V_F | V | 0.92 max. | $I_F=1.2A$ |
| 2 | Reverse Leakage Current | I_R | μA | 10 max. | $V_R=V_{RM}$ |
| 3 | Reverse Leakage Current Under High Temperature | $H \cdot I_{R1}$ | μA | 50 max. | $V_R=V_{RM}, T_j=100^\circ\text{C}$ |
| | | $H \cdot I_{R2}$ | μA | 500 max. | $V_R=V_{RM}, T_j=150^\circ\text{C}$ |
| 4 | Thermal Resistance | $R_{th(j-l)}$ | °C/W | 17 max. | Between Junction and Lead |

6 Characteristics

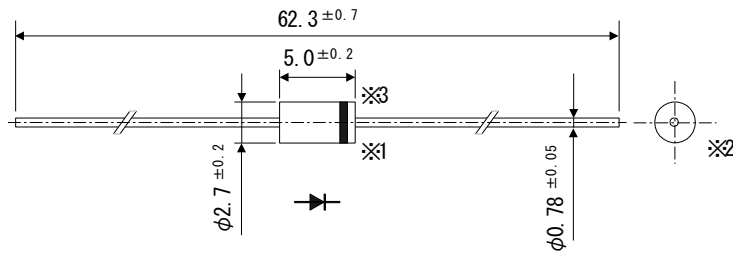


7 Derating



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 0.2mm(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 EM2 is abbreviated as M2
- 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

Cathode Mark

