

1 Scope

The present specifications shall apply to Sanken silicon diode EM1A.

2 Outline

Type	Silicon Diode	
Structure	Resin Molded	Flammability : UL94V-0 (equipment)
Applications	Commercial Frequency Rectification	

3 絶対最大定格

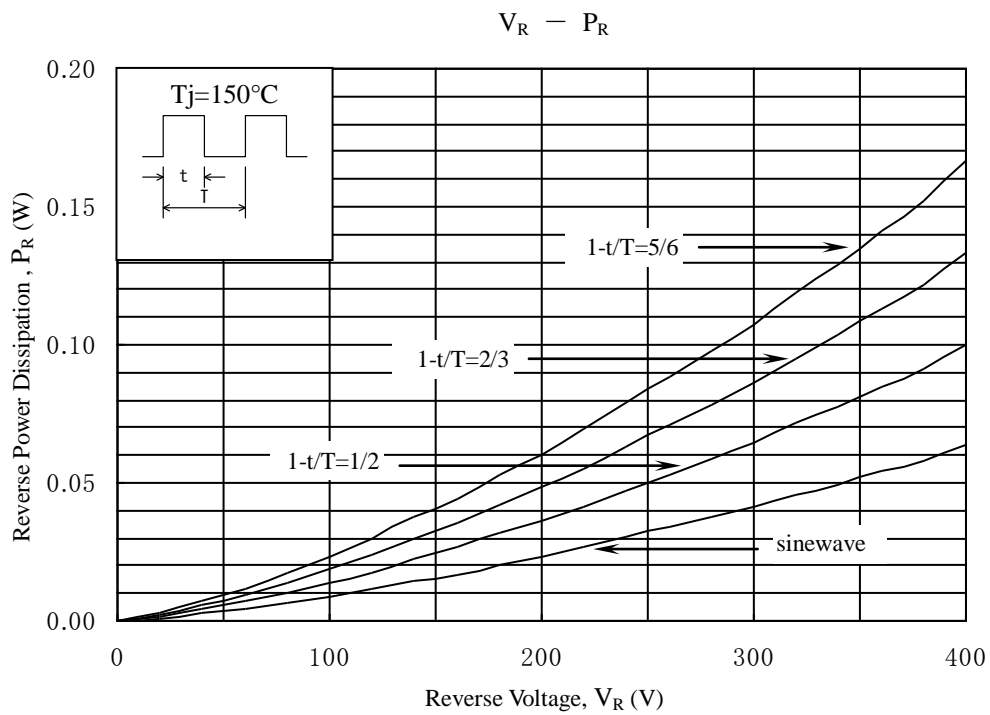
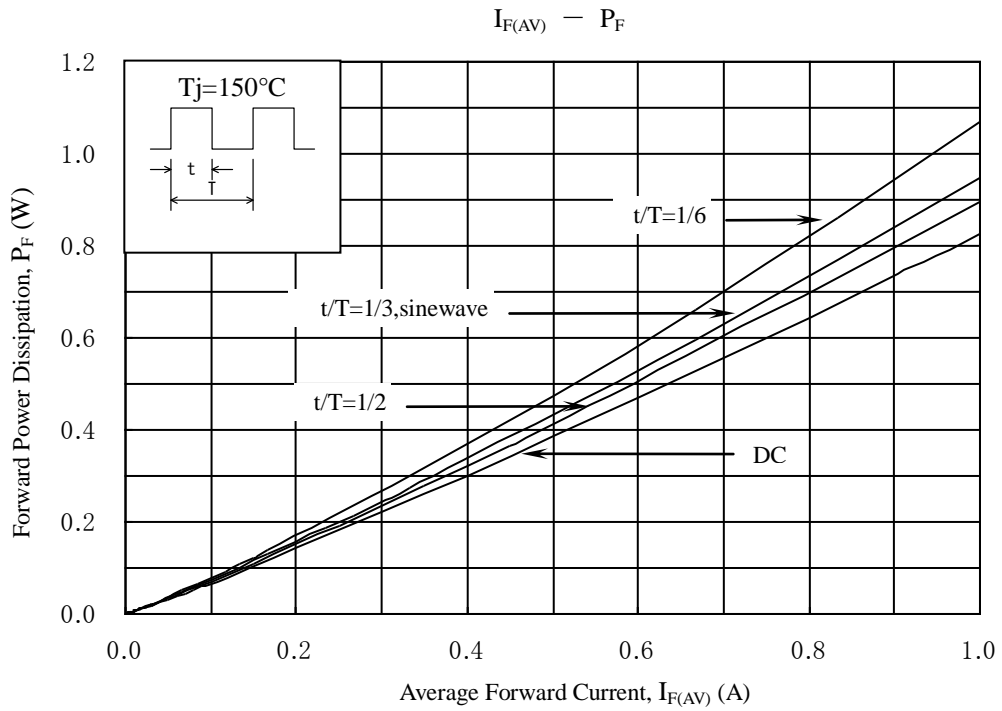
Absolute maximum ratings

No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	650	
2	Peak Reverse Voltage	V_{RM}	V	600	
3	Average Forward Current	$I_{F(AV)}$	A	1.0	Refer to Derating curve in Section 6
4	Peak Surge Forward Current	I_{FSM}	A	45	10ms. Half sine wave, one shot
5	I^2t Limiting Value	I^2t	A^2s	10.1	$1ms \leq t \leq 10ms$
6	Junction Temperature	T_j	$^{\circ}C$	-40 to +150	
7	Storage Temperature	T_{stg}	$^{\circ}C$	-40 to +150	

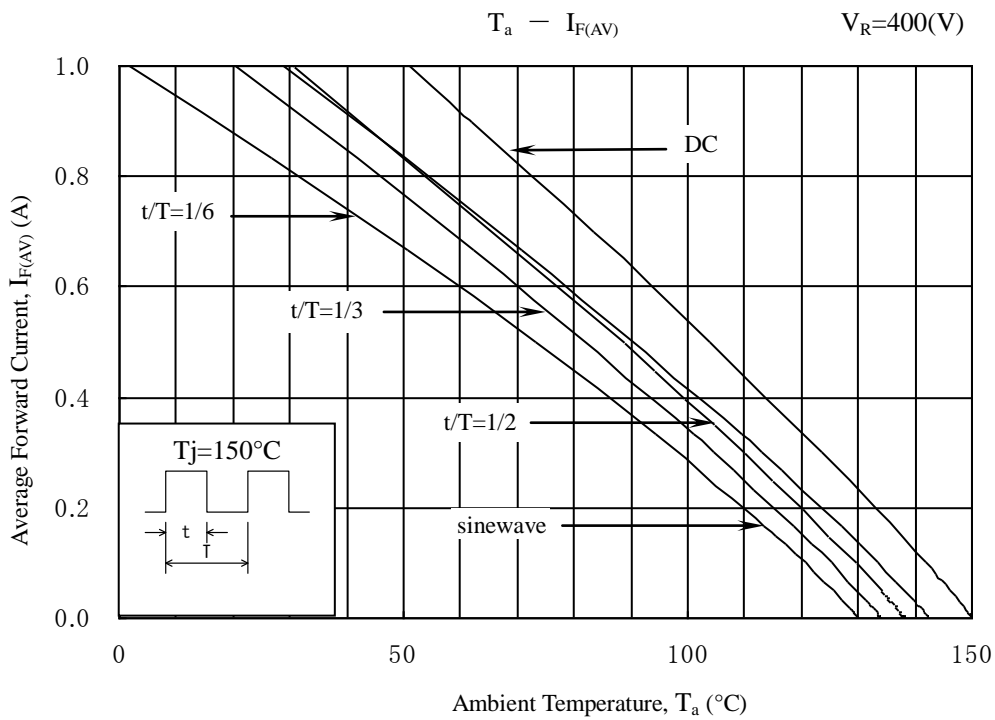
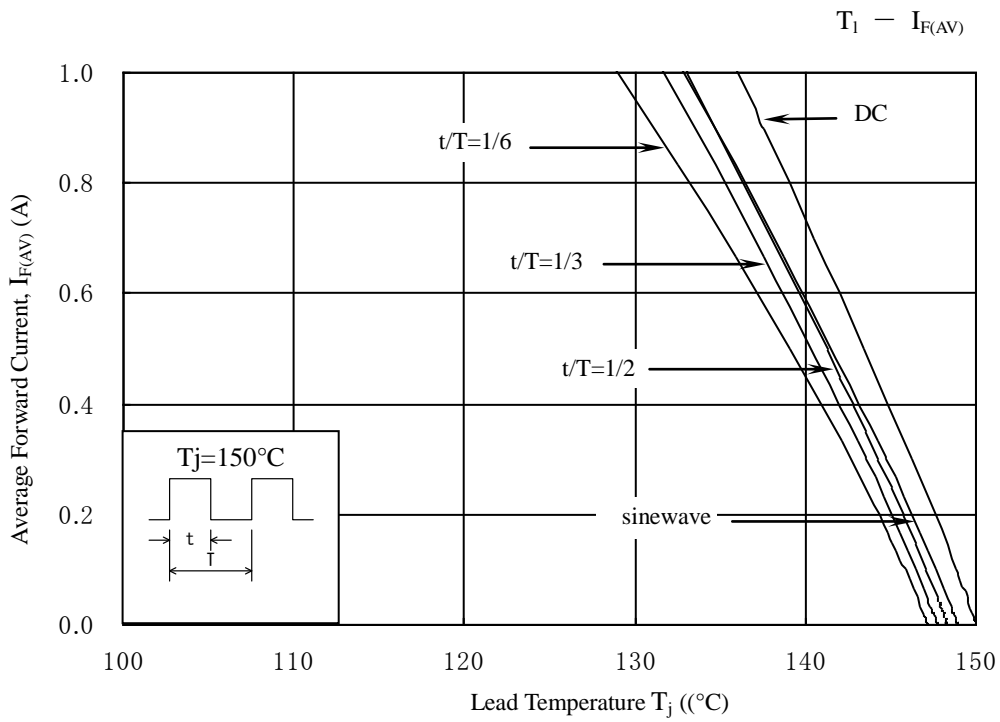
4 Electrical characteristics ($T_a=25^{\circ}C$, unless otherwise specified)

No.	Item	Symbol	Unit	Rating	Conditions
1	Forward Voltage Drop	V_F	V	0.97 max.	$I_F=1.0A$
2	Reverse Leakage Current	I_R	μA	10 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	μA	500 max.	$V_R=V_{RM}, T_j=150^{\circ}C$
4	Thermal Resistance	$R_{th(j-l)}$	$^{\circ}C/W$	17 max.	Between Junction and Lead

5 Characteristics

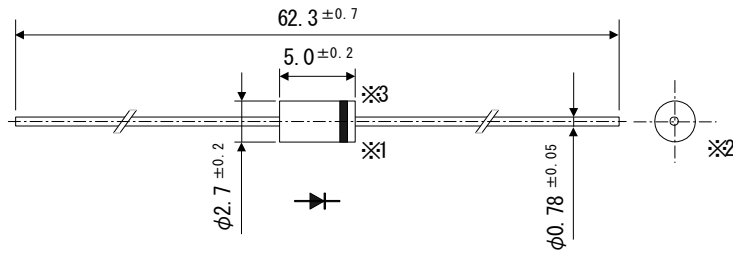


6 Derating



7 Package information

7-1 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

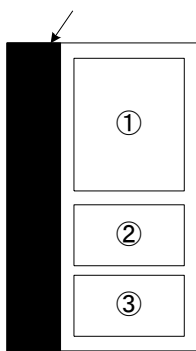
Dimensions in mm

7-2 Appearance

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

7-3 Marking

Cathode Mark



- ① Type number EM1A is abbreviated as $\begin{matrix} M1 \\ A \end{matrix}$
- 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