

1 Scope

The present specifications shall apply to an EM1Z.

2 Outline

Type	Silicon Diode
Structure	Resin Molded
Applications	Commercial Frequency Rectification

3 Flammability

UL94V-0(Equivalent)

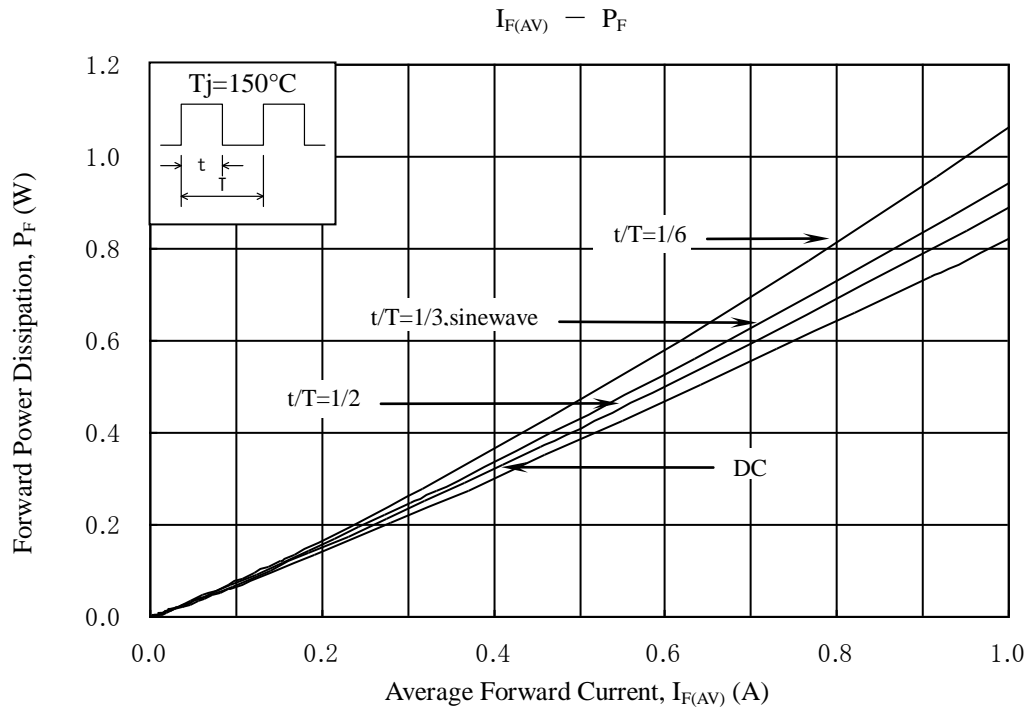
4 Absolute maximum ratings

No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	250	
2	Peak Reverse Voltage	V_{RM}	V	200	
3	Average Forward Current	$I_{F(AV)}$	A	1.0	Refer to derating curve in Section 7
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	

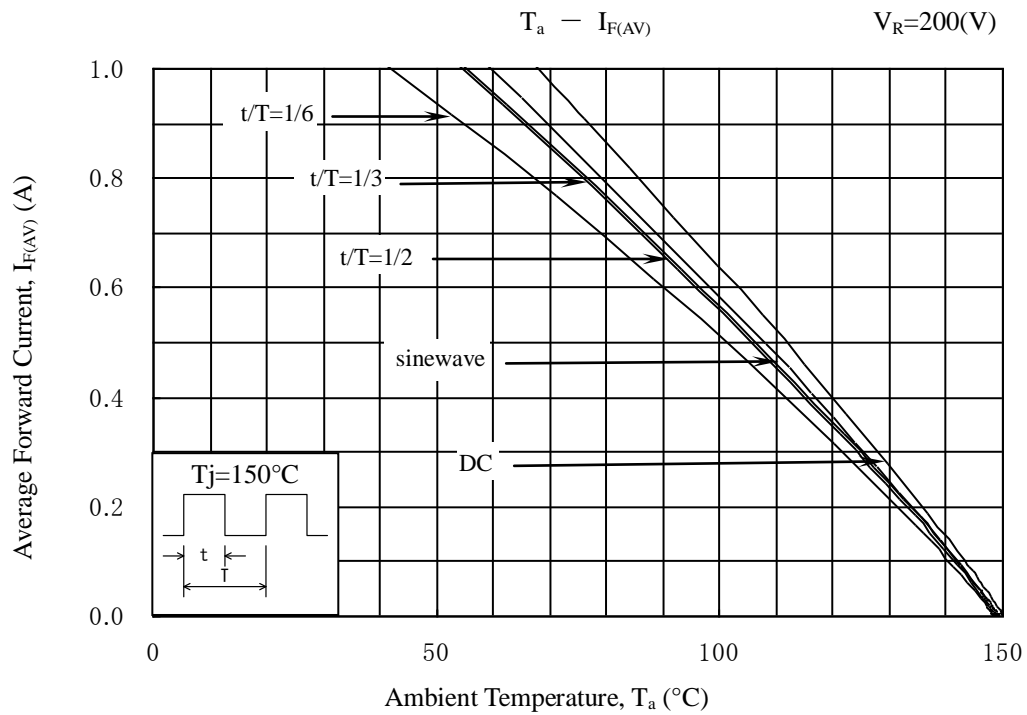
5 Electrical characteristics ($T_a=25^{\circ}C$, unless otherwise specified)

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

6 Characteristics

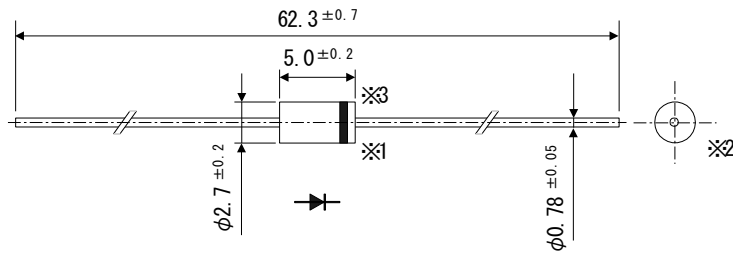


7 Derating



8Package information

8-1Package 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

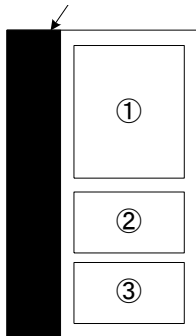
Dimensions in mm

8-2Appearance

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

8-3Marking

Cathode Mark



- ① Type number EM1Z is abbreviated as $\frac{M1}{Z}$
- 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