

### 1 Scope

The present specifications shall apply to an EM01Z.

### 2 Outline

Type	Silicon Diode
Structure	Resin Molded
Applications	Commercial Frequency Rectification

### 3 Flammability

UL94V-0(Equivalent)

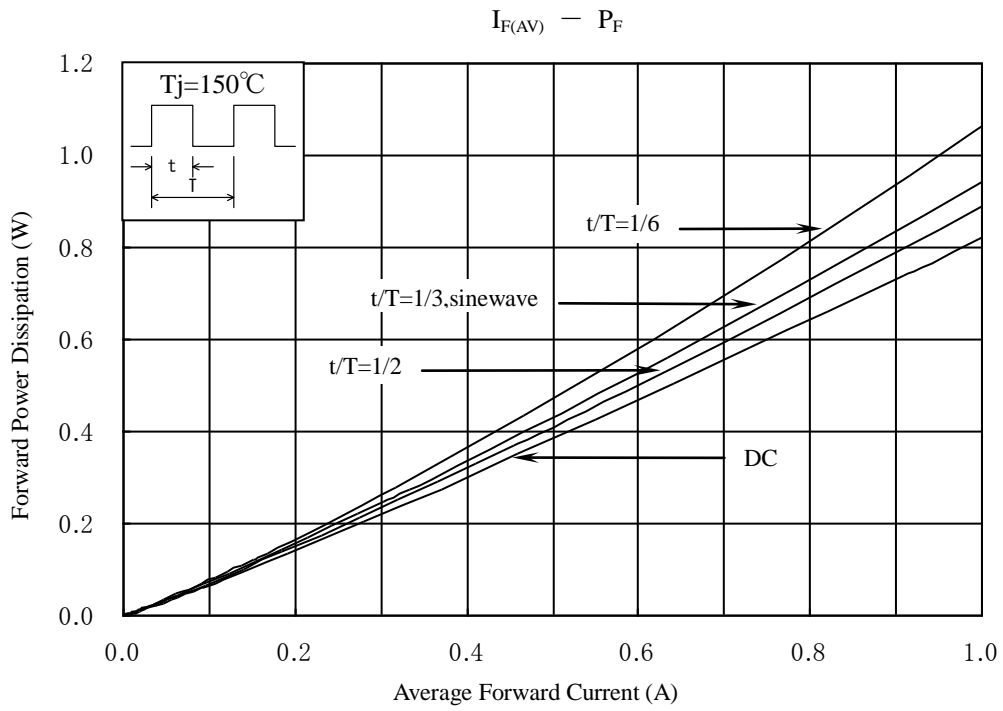
## 4 Absolute maximum ratings

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 of 7
4	Peak Surge Forward Current	$I_{FSM}$	A	45	10ms. Half sinewave, one shot
5	$I^2t$ Limiting Value	$I^2t$	$A^2s$	10	$1ms \leq t \leq 10ms$
6	Junction Temperature	$T_j$	$^{\circ}C$	-40 to +150	
7	Storage Temperature	$T_{stg}$	$^{\circ}C$	-40 to +150	

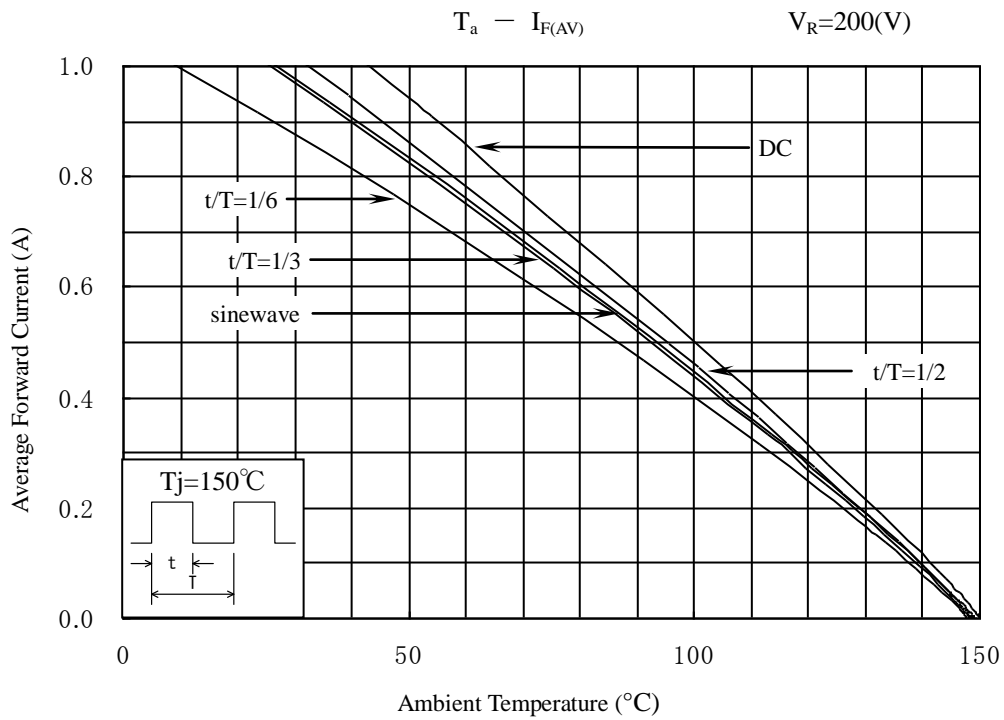
5 Electrical characteristics ( $T_a=25^{\circ}C$ , unless otherwise specified)

No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	$V_F$	V	0.97 max.	$I_F=1.0A$
2	Reverse Leakage Current	$I_R$	$\mu A$	10 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	$\mu A$	50 max.	$V_R=V_{RM}, T_j=100^{\circ}C$
4	Thermal Resistance	$R_{th(j-l)}$	$^{\circ}C/W$	20 max.	Between Junction and Lead

6 Characteristics

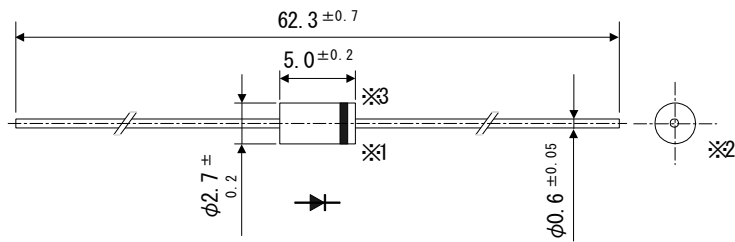


7 Derating



8 Package information

8-1 Package type, physical dimensions and material



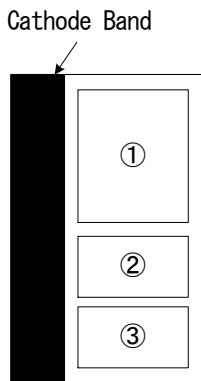
- \*1 The allowance position of Body against the center of whole lead wire is 0.5mm(max.)
- \*2 The centric allowance of lead wire against center of physical body is 0.2mm(max.)
- \*3 The burr may exit up to 2mm from the body of lead

Dimensions in mm

8-2 Appearance

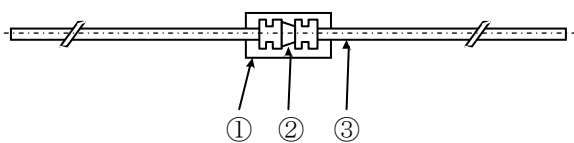
The body shall be clean and shall not bear any stain, rust or flaw.

8-3 Marking



- ① Type number EM01Z is abbreviated as <sup>MO</sup>/<sub>Z</sub>
- 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

9 Internal structure diagram



No.	Name of part	Materials
①	Plastic body	Epoxy Resin
②	Chip	Silicon
③	Leads	Solder Dipped Silver plated copper wire

Weight of products: Approx. 0.2g