

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)

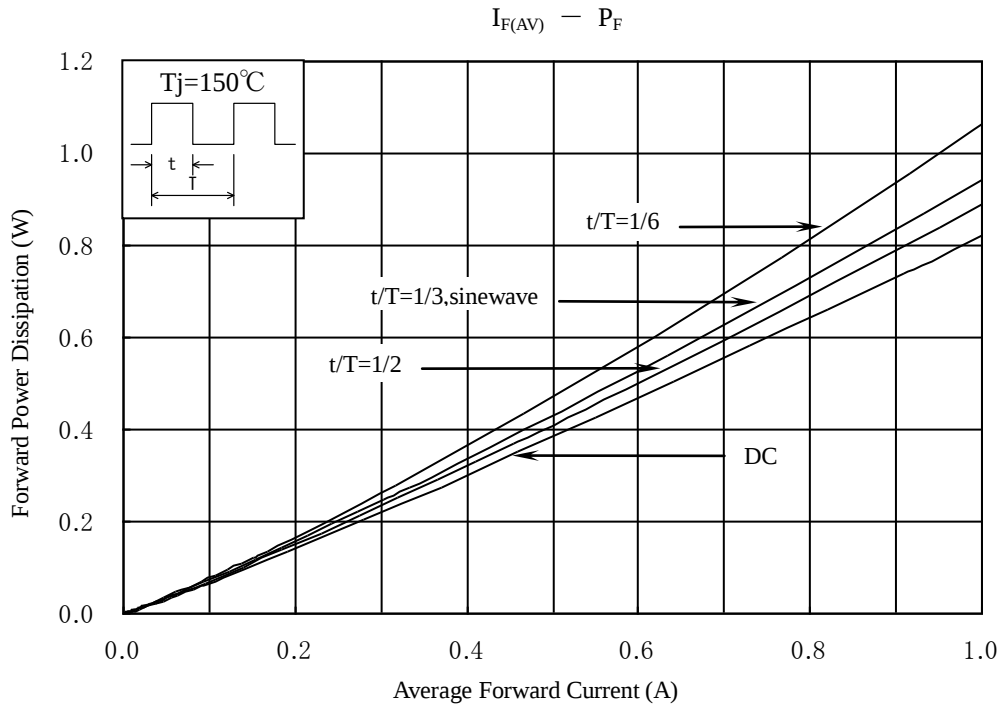
4 Absolute maximum ratings

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	°C	-40 to +150	
7	Storage Temperature	T_{stg}	°C	-40 to +150	

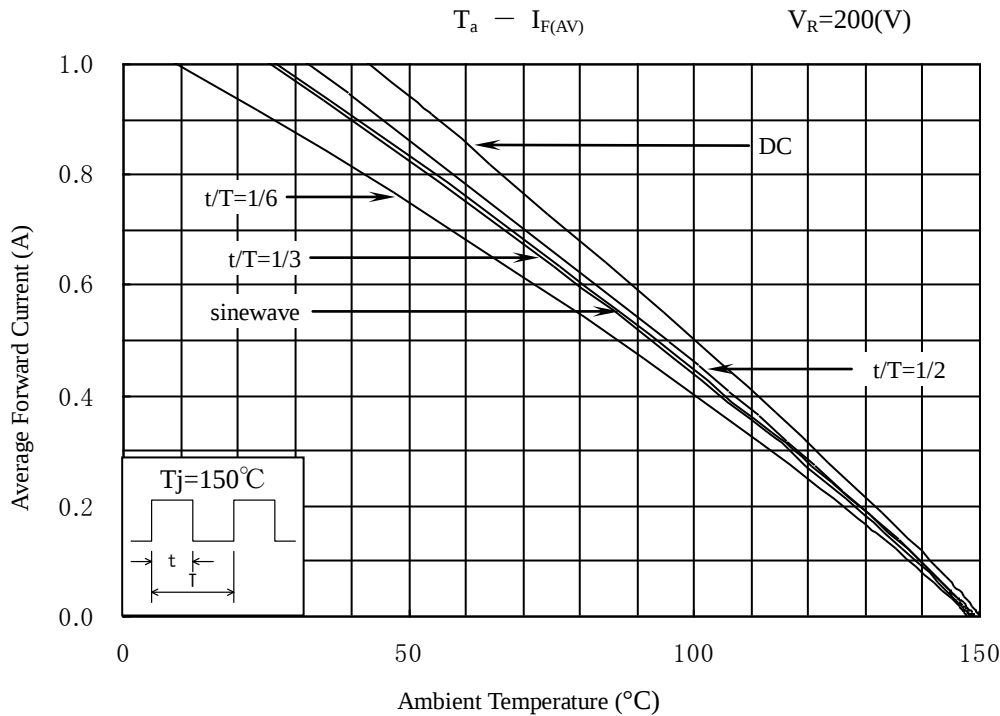
5 Electrical characteristics (Ta=25°C, unless otherwise specified)

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	uA	10 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	uA	50 max.	$V_R=V_{RM}$, $T_j=100^\circ C$
4	Thermal Resistance	$R_{th(j-l)}$	°C /W	20 max.	Between Junction and Lead

6 Characteristics

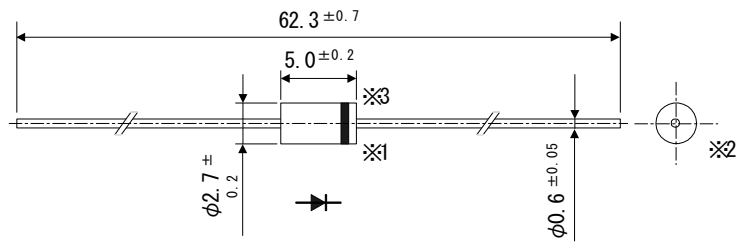


7 Derating



8 Package information

8-1 Package type, physical dimensions and material



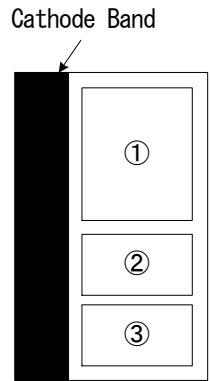
- *1 The allowance position of Body against the center of whole lead wire is 0.5mm(max.)
- *2 The centric allowance of lead wire against center of physical body is 0.2mm(max.)
- *3 The burr may exit up to 2mm from the body of lead

Dimensions in mm

8-2 Appearance

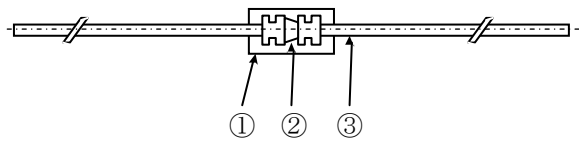
The body shall be clean and shall not bear any stain, rust or flaw.

8-3 Marking



- ① Type number EM01Z is abbreviated as ^{MO}_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

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