



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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)

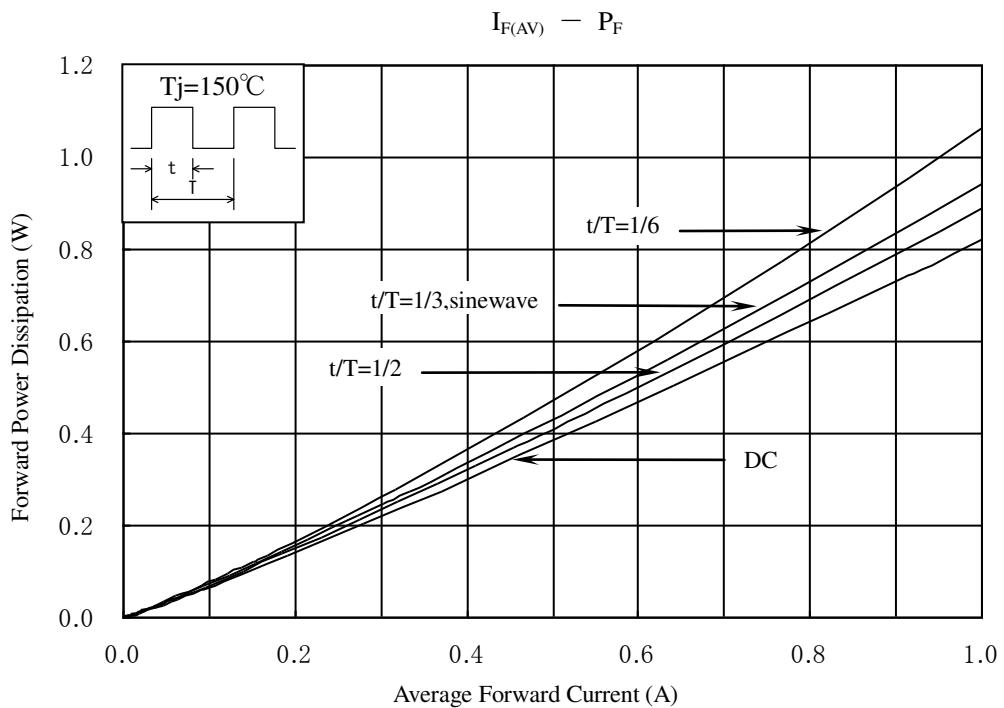
4 Absolute maximum ratings

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	

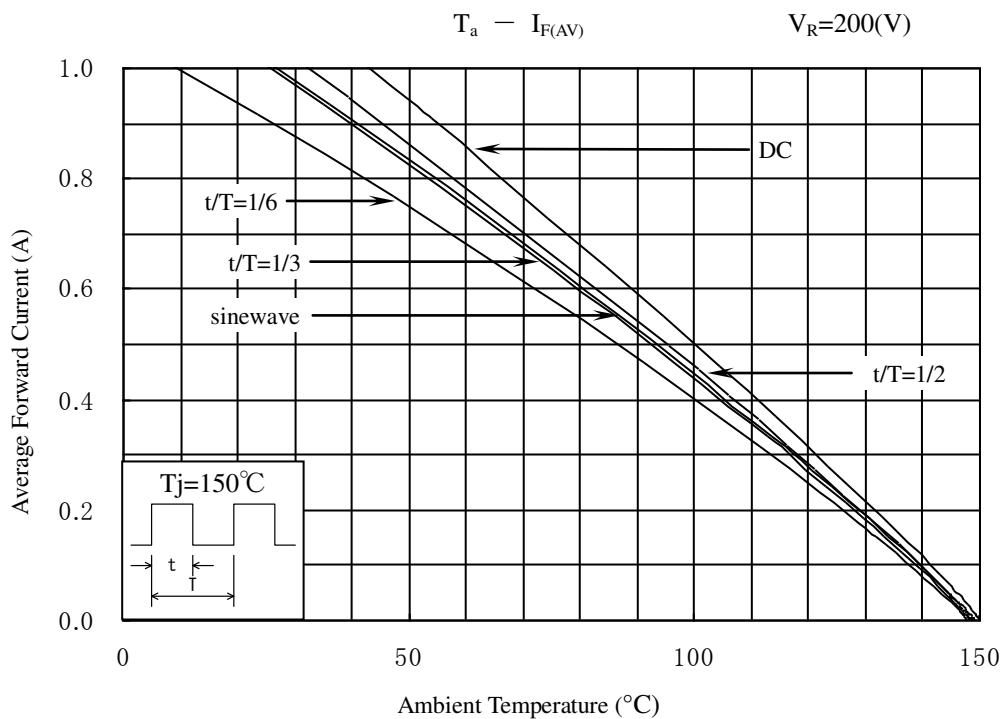
5 Electrical characteristics (Ta=25°C, unless otherwise specified)

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	$R_{th(j-l)}$	$^{\circ}C /W$	20 max.	Between Junction and Lead

6 Characteristics

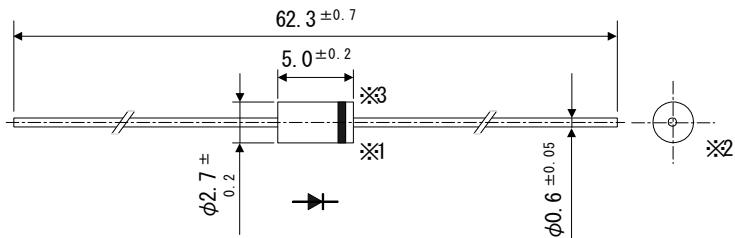


7 Derating



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.)

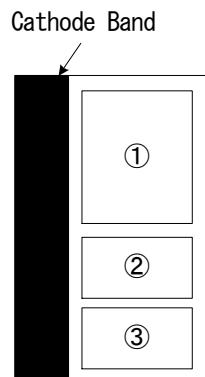
*3 The burr may exit up to 2mm from the body of lead

Dimensions in **mm**

8-2 Appearance

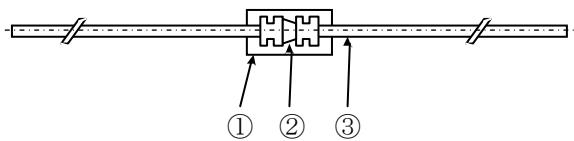
The body shall be clean and shall not bear any stain, rust or flaw.

8-3 Marking



- ① Type number EM01Z is abbreviated as ^{M0}_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