

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 EM1.

## 2 Outline

Туре	Silicon Diode
Structure	Resin Molded
Applications	Commercial Frequency Rectification

# 3 Flammability

UL94V-0(Equivalent)

## 4 Absolute maximum ratings

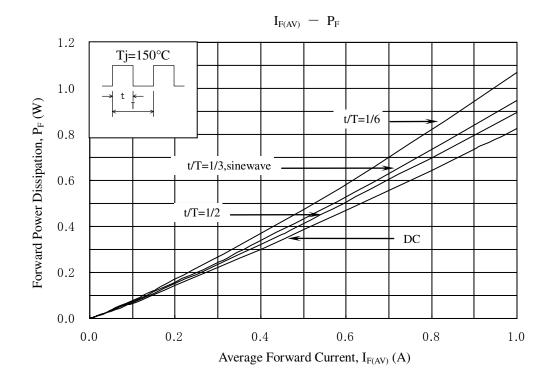
No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V <sub>RSM</sub>	V	450	
2	Peak Reverse Voltage	$V_{RM}$	V	400	
3	Average Forward Current	I <sub>F(AV)</sub>	A	1.0	Refer to Derating curve in Section 7
4	Peak Surge Forward Current	$I_{FSM}$	A	45	10ms. Half sine wave, one shot
5	I <sup>2</sup> t Limiting Value	$I^2t$	$A^2s$	10.1	$1\text{ms} \le t \le 10\text{ms}$
6	Junction Temperature	$T_{\rm j}$	°C	-40 to +150	
7	Storage Temperature	$T_{stg}$	°C	-40 to +150	

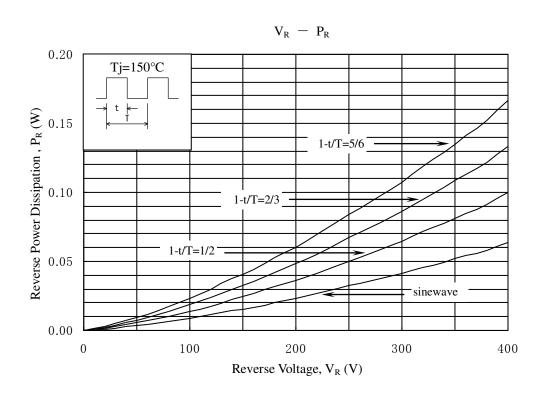
# 5 Electrical characteristics (Ta=25°C, unless otherwise specified)

No.	Item	Symbol	Unit	Rating	Conditions
1	Forward Voltage Drop	$V_{\mathrm{F}}$	V	0.97 max.	I <sub>F</sub> =1.0A
2	Reverse Leakage Current	$I_R$	μΑ	10 max.	$V_R = V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	μΑ	500 max.	V <sub>R</sub> =V <sub>RM</sub> , T <sub>j</sub> =150°C
4	Thermal Resistance	$R_{th(j-l)}$	°C/W	17 max.	Between Junction and Lead

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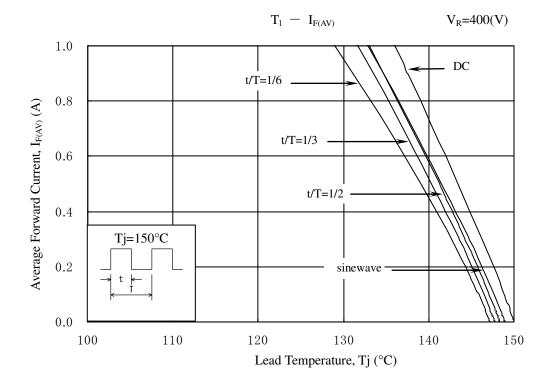
#### 6 Characteristics

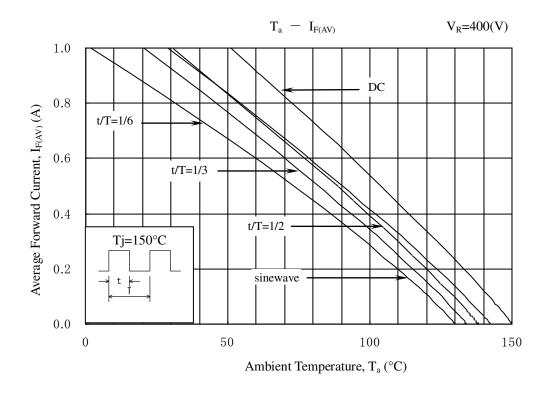




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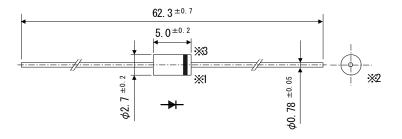




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### 8 Package information

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

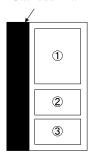
Dimensions in mm

## 8-2Appearance

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

#### 8-3Marking

Cathode Mark



- ① Type number EM1 is abbreviated as M1
- 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. Lot number 2 (ten days)

- - Top of the month
    Middle of m
  - Middle of month End of month