



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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: [info@chipsmall.com](mailto:info@chipsmall.com) Web: [www.chipsmall.com](http://www.chipsmall.com)

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## 1 Scope

The present specifications shall apply to an EG1.

## 2 Outline

|              |                              |
|--------------|------------------------------|
| Type         | Silicon Diode                |
| Structure    | Resin Molded                 |
| Applications | High Frequency Rectification |

## 3 Flammability

UL94V-0(Equivalent)

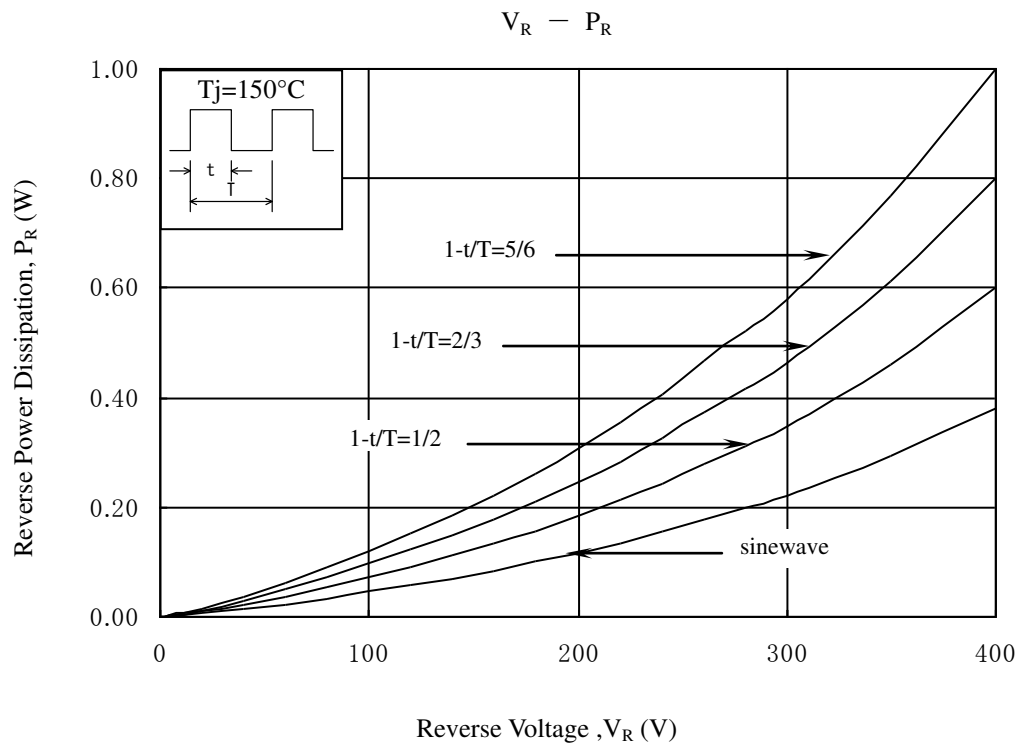
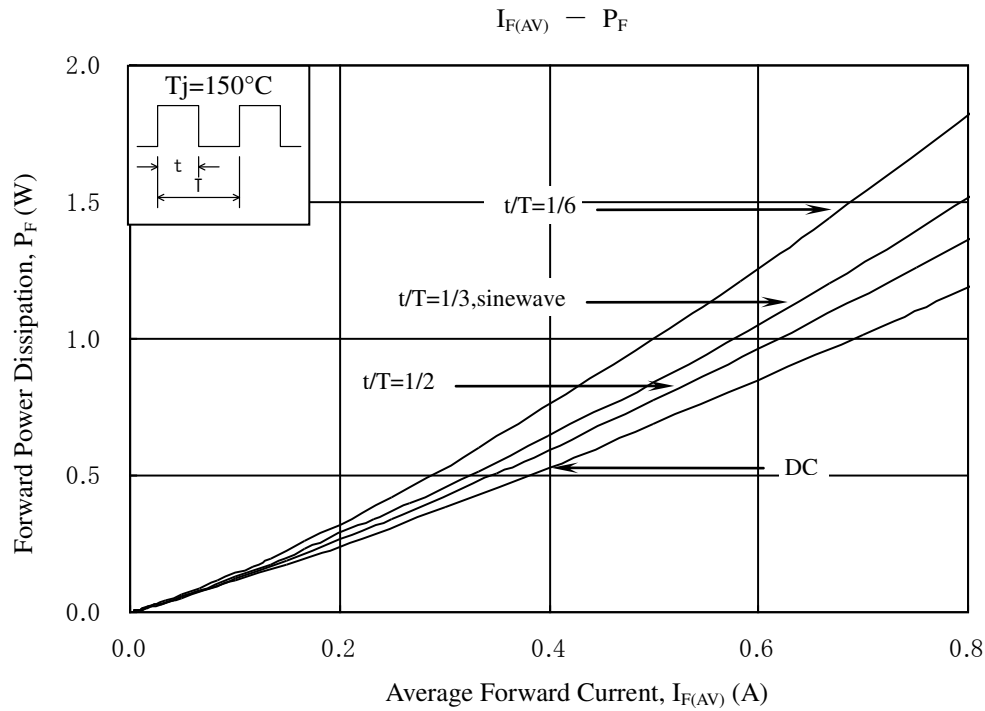
## 4 Absolute maximum ratings

| No. | Item                           | Symbol      | Unit   | Rating      | Conditions                           |
|-----|--------------------------------|-------------|--------|-------------|--------------------------------------|
| 1   | Transient Peak Reverse Voltage | $V_{RSM}$   | V      | 400         |                                      |
| 2   | Peak Reverse Voltage           | $V_{RM}$    | V      | 400         |                                      |
| 3   | Average Forward Current        | $I_{F(AV)}$ | A      | 0.8         | Refer to derating curve in Section 7 |
| 4   | Peak Surge Forward Current     | $I_{FSM}$   | A      | 15          | 10ms.<br>Half sine wave, one shot    |
| 5   | $I^2t$ Limiting Value          | $I^2t$      | $A^2s$ | 1.125       | $1ms \leq t \leq 10ms$               |
| 6   | Junction Temperature           | $T_j$       | °C     | -40 to +150 |                                      |
| 7   | Storage Temperature            | $T_{stg}$   | °C     | -40 to +150 |                                      |

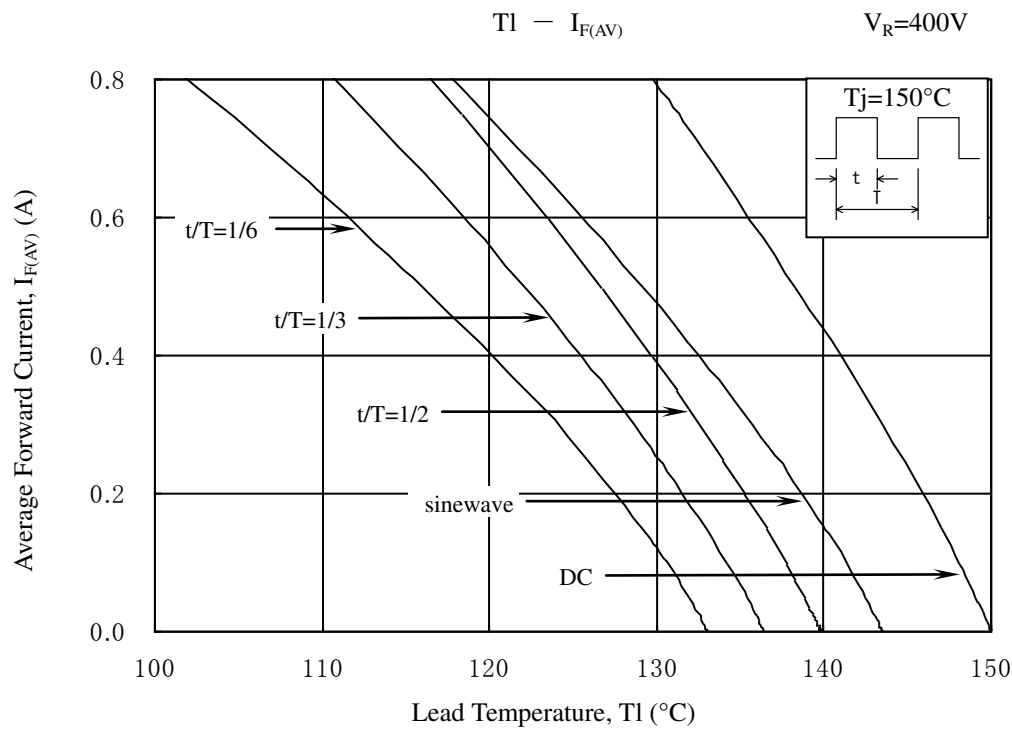
## 5 Electrical characteristics (Ta=25°C, unless otherwise specified)

| No. | Item   | Symbol           | Unit | Rating   | Conditions  |
|-----|--|------------------|------|----------|---|
| 1   | Forward Voltage Drop                           | $V_F$            | V    | 1.8 max. | $I_F=0.8A$  |
| 2   | Reverse Leakage Current                        | $I_R$            | uA   | 50 max.  | $V_R=V_{RM}$  |
| 3   | Reverse Leakage Current Under High Temperature | $H \cdot I_{R1}$ | uA   | 300 max. | $V_R=V_{RM}, T_j=100^\circ C$                                     |
|     |  | $H \cdot I_{R2}$ | mA   | 3.0 max. | $V_R=V_{RM}, T_j=150^\circ C$                                     |
| 4   | Reverse Recovery Time                          | trr-1            | ns   | 100 max. | $I_F=I_{RP}=100mA$<br>90% Recovery point, $T_j=25^\circ C$        |
|     |  | trr-2            | ns   | 50 max.  | $I_F=100mA, I_{RP}=200mA$<br>75% Recovery point, $T_j=25^\circ C$ |
| 5   | Thermal Resistance                             | $R_{th(j-l)}$    | °C/W | 17 max.  | Between Junction and Lead   |

6 Characteristics

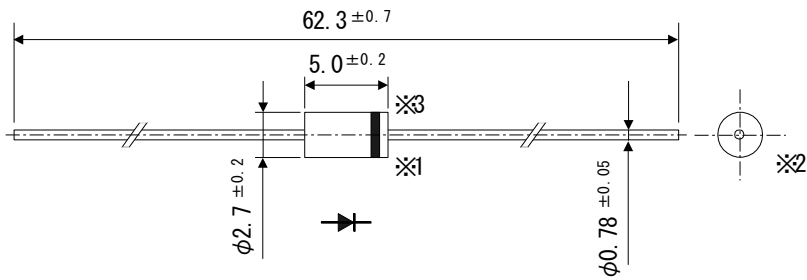


7 Derating



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

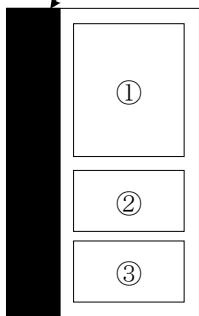
Dimensions in mm

8-2 Appearance

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

8-3 Marking

Cathode Mark



- ① Type number EG1 is abbreviated as G1
- 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