

## 1. Scope :

This specification applies to N/P/N silicon zener double diodes chips,  
Device NO. SD-00866GVA

## 2. Structure :

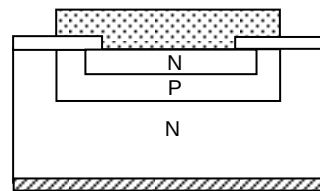
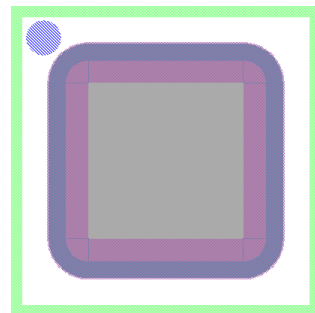
- 2-1. Planar type : N/P/N.
- 2-2. Electrodes :  
Top side : Gold pad.  
Back side : SnAu Alloy.

## 3. Size :

- 3-1. <sup>\*1</sup> Chip size : 8.5 mils x 8.5 mils (0.215 mm x 0.215 mm ).
- 3-2. Chip thickness :  $4.0 \pm 1.0$  mils ( $0.100 \pm 0.0254$  mm ).
- 3-3. <sup>\*2</sup> Bonding pad : 5.9 mils x 5.9 mils (0.150 mm x 0.150 mm) .
- 3-4. Pattern drawing : Refer to the attached drawing.  
<sup>\*1</sup> Including scribing line. The chip size is about  $(0.190 \pm 0.015)^2 \text{mm}^2$  after dicing.  
<sup>\*2</sup> The bonding pad dimension is  $(0.150 \pm 0.005)^2 \text{mm}^2$ .

## 4. Electrical characteristics (Ta = 25 °C) \_one Zener

| Parameter       | Symbol      | Condition                         | Min. | Typ. | Max. | Unit |
|-----------------|-------------|-----------------------------------|------|------|------|------|
| Leakage Current | Idf         | V=4V<br>Ee=0mW/cm <sup>2</sup>    |      |      | 100  | nA   |
|                 | Idr         | V=4V<br>Ee=0mW/cm <sup>2</sup>    |      |      | 100  |      |
| Zener Voltage   | Vz(forward) | Izf=5mA<br>Ee=0mW/cm <sup>2</sup> | 5.5  |      | 7.0  | V    |
|                 | Vz(reverse) | Izr=5mA<br>Ee=0mW/cm <sup>2</sup> | 5.3  |      | 6.8  |      |



## 5. Annotation :

- 5-1. Parallel with one LED
- 5-2. Single pad (one wire bonding applied only)
- 5-3. Double direction Zener diode protection

Equivalent Circuit

