## 1. Scope :

This specification applies to N/P silicon zener diode chips,
Device NO. SD-40812GVA

## 2. Structure :

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

## 3. Size :

3-1. *1 Chip size : 8.5 mils x 8.5 mils (0.215 mm x 0.215 mm ).
3-2. Chip thickness : 4.0 ± 1.0 mils (0.100 ± 0.025 mm ).
3-3. Active area : 5.3 mils x 5.3 mils (0.135 mm x 0.135 mm).
3-4. *2 Bonding pad : 5.9 mils x 5.9 mils (0.150 mm x 0.150 mm) .
3-5. Pattern drawing : Refer to the attached drawing.

*1 Including scribing line. The chip size is about (0.190±0.015)$^2$mm$^2$ after dicing.
*2 The bonding pad dimension is (0.150±0.015)$^2$mm$^2$.

## 4. Electrical characteristics (Ta = 25 ℃)

| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|---|
| *3 Reverse Leakage Current | $I_R$ | $V_R$=8V<br>Ee=0mW/cm$^2$ | | | 100 | nA |
| *3 Zener Voltage | Vz | $I_Z$=5mA<br>Ee=0mW/cm$^2$ | 9 | | 15 | V |
| *3 Forward Voltage | Vf | $I_F$=20mA<br>Ee=0mW/cm$^2$ | | | 1.2 | V |

*3 Based on 100% probing.