

1. Scope :

This specification applies to P/N silicon zener diode chips,
Device NO. SD-30812GVA

2. Structure :

- 2-1. Planar type : P/N 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 $(0.190 \pm 0.015)^2 \text{mm}^2$ after dicing.

^{**2}The bonding pad dimension is $(0.150 \pm 0.005)^2 \text{mm}^2$ after etching.

4. Electrical characteristics (Ta = 25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse Leakage Current	I_R	$V_R=9V$ $E_e=0\text{mW/cm}^2$			100	nA
Zener Voltage	V_Z	$I_Z=5\text{mA}$ $E_e=0\text{mW/cm}^2$	10		14	V
Forward Voltage	V_f	$I_f=20\text{mA}$ $E_e=0\text{mW/cm}^2$	0.75		1.2	V

