

**1. Scope :**

This specification applies to N/P/N silicon zener double diodes chips,  
Device NO. SD-00811GNL

**2. Structure :**

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

**3. Size :**

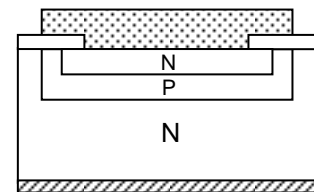
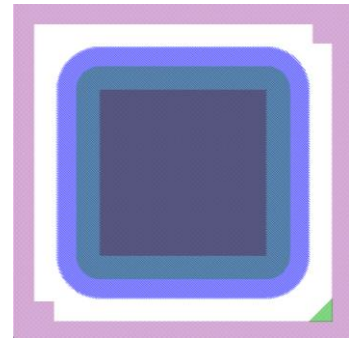
- 3-1. <sup>\*1</sup>Chip size : 8.5 mils x 8.5 mils (0.215 mm x 0.215 mm ).
- 3-2. Chip thickness :  $6.0 \pm 1.0$  mils ( $0.150 \pm 0.025$  mm ).
- 3-3. Bonding pad : 5.9 mils x 5.9 mils (0.150 mm x 0.150 mm) .
- 3-4. Pattern drawing : Refer to the attached drawing.

<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)**

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Leakage Current	Idf	V=5V Ee=0mW/cm <sup>2</sup>			500	nA
	Idr	V=5V Ee=0mW/cm <sup>2</sup>			500	
Zener Voltage	Vz(forward)	Izf=5mA Ee=0mW/cm <sup>2</sup>	5.2		8.0	V
	Vz(reverse)	Izr=5mA Ee=0mW/cm <sup>2</sup>	8.0		13.0	



**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

