

**1. Scope :**

This specification applies to P/N silicon zener diode chips,  
Device NO. SD-30612N

**2. Structure :**

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

**3. Size :**

- 3-1. <sup>※1</sup> Chip size : 6.88 mils x 6.88 mils (0.175 mm x 0.175 mm ).  
3-2. Chip thickness :  $4.0 \pm 1.0$  mils ( $0.100 \pm 0.025$  mm )  
3-3. Active area : 4.1 mils x 4.1 mils (0.105 mm x 0.105 mm).  
3-4. <sup>※2</sup> Bonding pad : 4.3 mils x 4.3 mils (0.110 mm x 0.110 mm).  
3-5. Pattern drawing : Refer to the attached drawing.

<sup>※1</sup> Including scribing line. The chip size is about  $(0.150 \pm 0.015)^2 \text{mm}^2$  after dicing.

<sup>※2</sup> The bonding pad dimension is about  $(0.110 \pm 0.005)^2 \text{mm}^2$  after etching.

**4. Electrical characteristics (Ta = 25 °C)**

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

