

Zener Diode Chips for ESD Protection

1. Feature:

- 1-1 Silicon Zener diode chips for electrostatic discharge(ESD) protection application
- 1-2 This specification applies to P-Type silicon Zener diode chip Device NO:WT-Z106P-4-12

2. Structure:

- 2-1 Planar type: Silicon Diode
- 2-2 Electrodes:
 - Top side: Aluminum Alloy (Anode).
 - Back side: Gold Layer (Cathode).

3. Size:

- 3-1. *Chip size : 6.88 mils x 6.88 mils ($175\mu\text{m} \times 17.5\mu\text{m}$).
 - 3-2. Chip thickness : 3.3 ± 0.6 mils ($85 \pm 15\mu\text{m}$).
 - 3-3. Active area : 4.1 mils x 4.1 mils ($105\mu\text{m} \times 105\mu\text{m}$).
 - 3-4. Bonding pad : 4.5 mils x 4.5 mils ($115\mu\text{m} \times 115\mu\text{m}$).
 - 3-5. Pattern drawing : Refer to the attached drawing.
- * Including scribing line. The chip size is about 5.9mil(0.150mm) after dicing.

4. Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Zener Voltage	V_Z	$I_Z = 5\text{mA}$	11	-	13	V
Forward Voltage	V_f	$I_F = 20\text{mA}$	0.75	-	1.2	V
Reverse Leakage Current	I_R	$V_R = 10\text{V}$	-	-	100	nA
Electrostatic Discharge	ESD	HBM MIL-STD 883	8.0	-	-	KV

5. Drawing:

