

Zener Diode Chips (Dual Pad) for ESD Bidirectional Protection

1. Feature:

1-1 This specification applies to N/P/N silicon zener double diodes chips,
Device NO. WT-Z224V-AU4

2. Structure:

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

3. Size:

- 3-1. Chip size : 24 mils x 24 mils (609.6 μm x 609.6 μm).
 - 3-2. Chip thickness : 7.87 \pm 1.0 mils (200 \pm 2.54 μm).
 - 3-3. Bonding pad : 19.3 mils x 19.3 mils (490 μm x 490 μm).
 - 3-4. Pattern drawing : Refer to the attached drawing.
- * Including scribing line. The chip size is about 23mil(585 μm) after dicing.

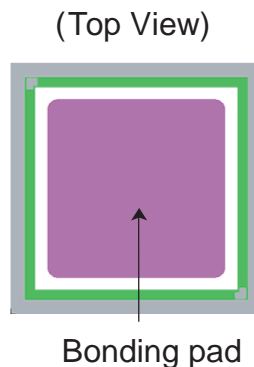
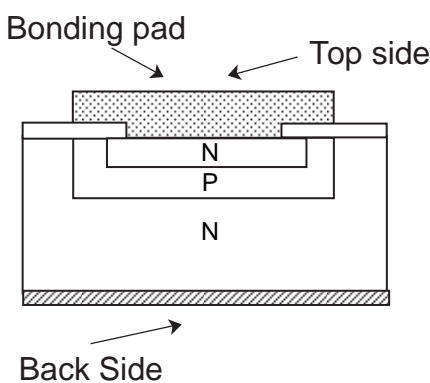
4. Electrical Characteristics (T_A=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Leakage Current	I _{df}	V=4V H=0mW/cm ²	-	-	100	nA
		V=5V H=0mW/cm ²	-	-	0.5	μA
	I _{dr}	V=4V H=0mW/cm ²	-	-	100	nA
		V=5V H=0mW/cm ²	-	-	0.5	μA
Zener Voltage	V _z (forward)	I _{zf} =5mA H=0mW/cm ²	5.5	-	7.0	V
	V _z (reverse)	I _{zf} =5mA H=0mW/cm ²	5.3	-	6.8	
Maximum Zener Current	I _{ZM}		-	-	750	mA
Electrostatic Discharge	ESD	HBM MIL-STD883	8.0	-	-	KV

5. Annotation :

- 5-1. Parallel with one LED
- 5-2. Single pad (one wire bonding applied only)
- 5-3. Double direction Zener diode protection

6. Drawing:



7. Protection Circuit:

