# **SPECIFICATION**

Product Description : Electromagnetic Buzzer

Product Model: WT-1310 Rev A/2017



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http://www.soberton.com

Acoustics	<b>Product</b>	<b>Specification</b>
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This specification applies Electromagnetic buzzer

## **SPECIFICATION**

Test condition: TEMP=  $\pm 2^{\circ}$ C Related Humidity=  $65 \pm 5\%$  Air Pressure:  $860 \sim 1060$ mbar

Item	Unit	Specification	Condition
Rated Voltag	Vo-p	5.0	
Operating Volt	Vo-p	3.0 ~ 7.0	
Mean Current	mA	Max.40	At rated voltage direct current
Coil Resistance	Ω	47 ±5	
Sound Output	dBA	87	At 10cm( A-weight free air) At rated voltage direct current
Rated Frequency	Hz	2400 ±200	
Operating Temp	°C	-30 ∼ +70	
Storage Temp	°C	-40 ~ +80	
Dimension	mm	$12.8 \times 12.8 \times 10.0$	See attached drawing.
Weight	gram	2.5	
Material		PPS(Gray)	
Terminal		SMD Type (Plating Sn)	See attached drawing
Environmental Protection Regulation		RoHS	

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## ENVIRONMENT TEST

Item	Test condition	Evaluation standard
High temp. test	After being placed in a chamber at +80°C for 96 hours.	After the test the part will meet specifications
Low temp. test	After being placed in a chamber at -40°C for 96 hours.	without any degradation in appearance and
Thermal shock	The part will be subjected to 10 cycles.  One cycle shall consist of  +80°C  -40°C  30 min  60 min	performance except SPL.  after 4 hours at +25°C.  The SPL will be in  ±10dBA compared with initial one.
Temp./Humidity Cycle	The part will be subjected to 10 cycles.  One cycle shall be 24 hours and consist of;  +80°C  a,b:90~98%RH  c:80~98%RH  24hours	

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#### RELIABILITY TEST

Item		Test condition	Evaluation standard
	1.	Ordinary temperature	
		The part shall be subjected to 96 hours of continuous	After the test the part will
		operation at room temperature $+25 \pm 10^{\circ}$ C with	meet specifications without
Operating life		5.0V, 2400Hz	any degradation in appearance
test	2.	High temperature	and performance except SPL,
		The part shall be subjected to 72 hours of continuous	after 4 hours at +25°C.
		operation at +70°C with 5.0V, 2400Hz applied	The SPL would be in ±10dBA
	2.	Low temperature	compared with initial one.
		The part shall be subjected to 72 hours of continuous	
		operation at -30°C with 5.0V, 2400Hz applied	

#### **TEST CONDITION**

Standard Test Condition : a) Temperature:  $+5 \sim +35^{\circ}$ C b) Humidity:  $45 \sim 85\%$  c) Pressure:  $860 \sim 1060$  mbar

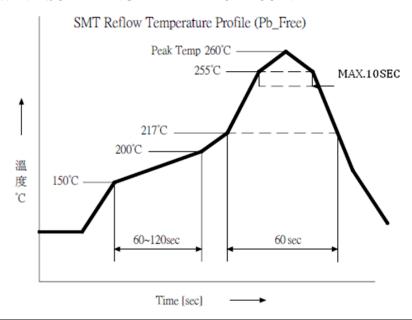
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### MECHANICAL CHARACTERISTICS

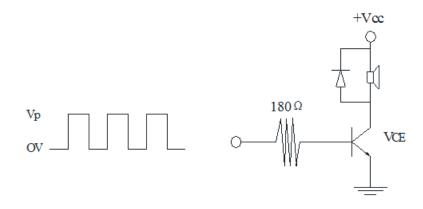
Item	Test condition	Evaluation standard
	Lead terminal are immersed in rosin for 5 seconds and	90% min. lead terminals
Solder ability	then immersed in solder bath of $+250 \pm 5^{\circ}$ C for $3 \pm 0.5$	will be wet with solder
	seconds	
		No interference in
Soldering Heat	Lead terminal are immersed in soldering bath of	operation
Resistance	$+250 \pm 5^{\circ}$ C for $2 \pm 0.5$ seconds	
Terminal	Apply the terminal with 1KG strength for 1 minute	No damage and cutting
Mechanical	rippi) and terminal with title strength for 1 minute	off
Strength		
	The part will be subjected to a vibration cycle of 10Hz to	After the test the part
	55Hz to 10Hz in a period of 1 minute. Total peak	will meet specifications
Vibration	amplitude will be 1.52mm(9.3G). The vibration test will	without any damage in
	consist of 2 hours per axis in each three $axes(X,Y,Z)$	appearance and
	Total 6 hours	performance except SPL.
		The SPL should be
	The part only will be dropped from a height of 75cm onto	80dBA compared with
Drop test	a 40mm thick wooden board 3 times in 3 axes $(X,Y,Z)$ .	initial one.
	A total of 9 times	0

## RECOMMENDED WAVE SOLDERING TEMPERATURE CURVE :

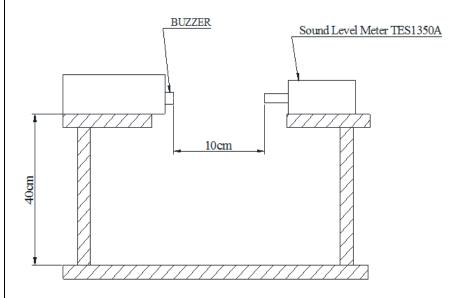


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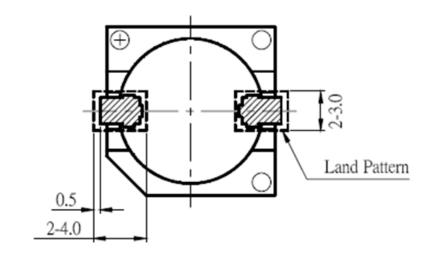
#### **MEASUREMENT METHOD**



### INSPECTION FIXTURE



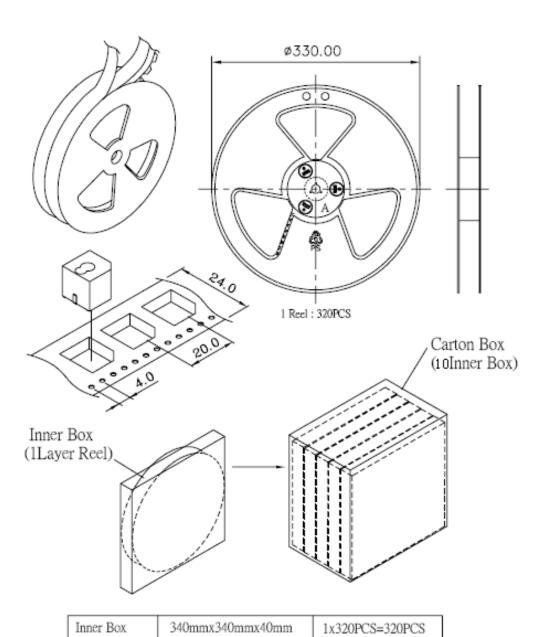
#### RECOMMENDED LAND PATTERN



Carton Box

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### **PACKING**

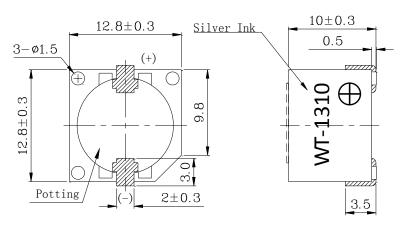


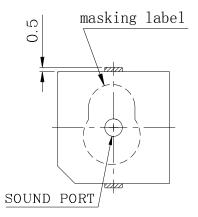
360mmx360mmx420mm

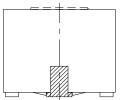
10x320PCS=3,200PCS

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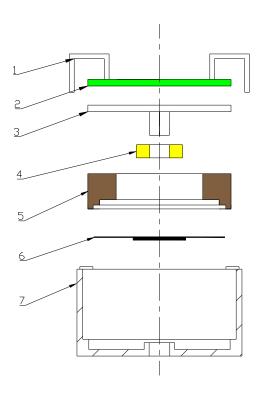
### **DIMENSION**







Tolerance: ± 0.5 Unit:mm



	1	1	1
7	CASE	PPS	1
6	Diaphragm	Ferrum	1
5	Magnet ring	Poly+ ferrite	1
4	Coil	Copper	1
3	Core	Ferrum	1
2	PCB	Epoxy glass fiber cloth+ Copper	1
1	PIN	Copper	2
No.	Components	Material	Q'TY