SPECIFICATION

Product Description : <u>Electro Magnetic Buzzer</u>

Product Model: WST-1310S-1

Soberton Inc.

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Part No:	WST-1310S-1
Date :	2016/07/13
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A: SCOPE

This specification applies magnetic buzzer WST-1310S-1

B: SPECIFICATION

Test condition: TEMP=+25±2 °C Related humidity=65±5% Air pressure:860-1060mbar

	Test condition. TEMP=+23±2 (Related numberly=03±3% All pressure.800-1000moar			
NO.	Item	Unit	Specification	Condition
1	Rated Voltage	Vo-p	1.5	
2	Operating Volt	Vo-p	1.0-3.0	
3	Mean Current	mA	Max.30	Applying rated voltage direct current
4	Coil Resistance	Ω	/	
5	Sound Output	dBA	75/10cm	Distance at 10cm(A-weight free air), Applying rated voltage direct current
6	Rated Frequency	Hz	2400±400	
7	Operating Temp	$^{\circ}$	-20-+70	
8	Storage Temp	$^{\circ}$	-30-+80	
9	Dimension	mm	L12.8×W12.8×H10.0	See attached drawing.
10	Weight	gram	2.8	
11	Material		PPS(Gray)	
12	Terminal		Pin type (Plating Sn)	See attached drawing
13	Storage life	month	6	6 months preservation at room temp(25±3°C),Humidity40%
14	Environmental Protection Regulation		RoHS	

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C:ENVIRONMENT TEST

No.	Item	Test condition	Evaluation standard
1	High temp. test	After being placed in a chamber at +80°C for 96 hours.	After the test the part shall meet specifications
2	Low temp. test	After being placed in a chamber at -30°C for 96 hours.	without any degradation in appearance and
3	Thermal shock	The part shall be subjected to 10 cycles. One cycle shall consist of; +80°C -30°C 30 min 60 min	performance except SPL. after 4 hours at $+25^{\circ}$ C. The SPL shall be in $\pm 10 \text{dBA}$ compared with initial one.
4	Temp./Humidity Cycle	The part shall be subjected to 10 cycle shall be 24 hours and consist of; +80°C a,b:90~98%RH c:80~98%RH 24hours	

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D:RELIABILITY TEST

No.	Item	Test condition	Evaluation standard
		1. Ordinary temperature	After the test the part shall
		The part shall be subjected to 96 hours at room	meet specifications without
		temperature	any degradation in appearance
			and performance except SPL.
		2. High temperature	after 4 hours at +25°C, The SPL
		The part shall be subjected to 72 hours at $+60^{\circ}$ C with	should be in ±10dBA
		1.5V applied.	compared with initial one.
1	Operating		
1	life test	3. Low temperature	
		The part shall be subjected to 72 hours at -20°C with	
		1.5V applied.	
		4. High and Low Voltage	
		Applying 1.0 voltage and 3.0 voltage, available time	
		24 hours each.	

TEST CONDITION.

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

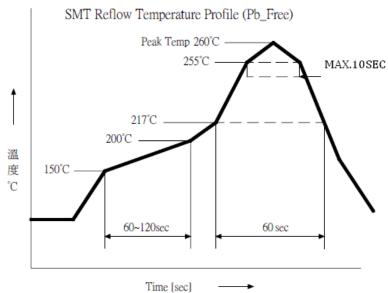
Judgement Test Condition :a)Temperature:+25±2°C b)Humidity:60~70% c)Pressure: 860~1060mbar

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E:MECHANICAL CHARACTERISTICS

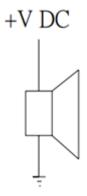
No.	Item	Test condition	Evaluation standard
1	Solder ability	Lead terminal are immersed in rosin for 5seconds and then immersed in solder bath of +250±5°C for 3±0.5 second	90% min.lead terminals shall be wet with solder
2	Soldering Heat Resistance	Lead terminal are immersed in soldering bath of +250±5°C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

F: Recommended Temperature Profile For Reflow Oven

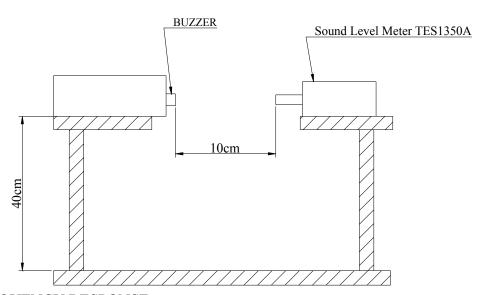


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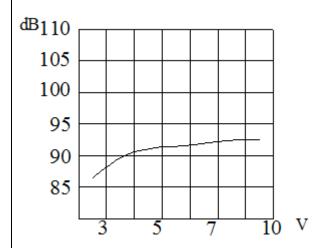
G:MEASUREMENT METHOD

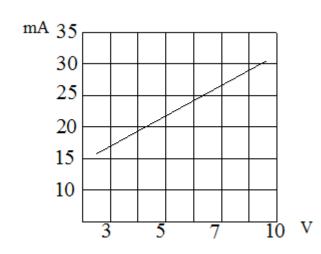


H:INSPECTION FIXTURE:



I: FREQUENCY RESPONSE

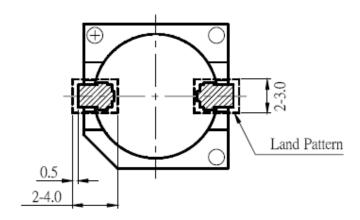




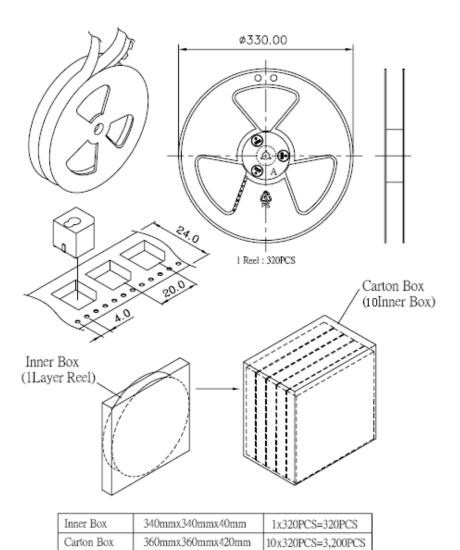
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J: Recommended land pattern

Recommendable Land Pattern

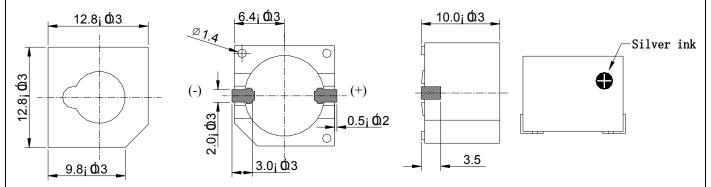


K: PACKING

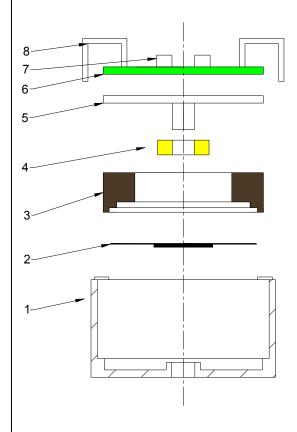


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L: DIMENSION



Tolerance: ± 0.5 Unit:mm



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