

SPECIFICATION FOR APPROVAL

Customer :

Description : Magnetic Transducer

Soberton Part No. : WST-1310S-3

Date : 2012-02-01

Customer Model No. :

Date of Approval	
Authorization Signature	

 **Soberton Inc.**

211 N. First Street
Minneapolis, MN. 55401

612-849-6205

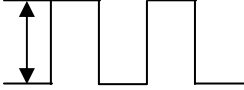
info@soberton.com

Approved	Checked	Design
Ryan 2012/02/01	Wang Cheng 2012/02/01	Song Qi 2012/02/01

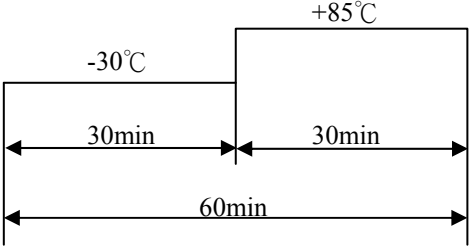
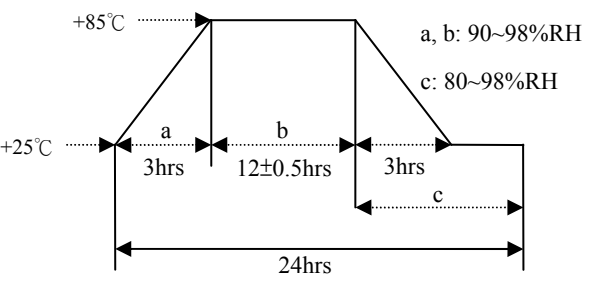
A:SCOPE This specification applies magnetic buzzer, WST-1310S-3

B:SPECIFICATION

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

NO.	Item	Unit	Specification	Condition
1	Rated Voltage	Vo-p	12	<div> <div>Vo-p</div>  <div>0V</div> </div>
2	Operating Volt	Vo-p	8.0 ~16.0	
3	Mean Current	mA	Max.30 Peak 100	Applying rated voltage.
4	Sound Output	dBA	85/10cm	Distance at 10cm(A-weight free air), Applying rated voltage.
5	Rated Frequency	Hz	2300±300Hz	
6	Operating Temp	°C	-20-+70	
7	Storage Temp	°C	-30-+80	
8	Dimension	mm	12.8*12.8*10	See attached drawing.
9	Weight	gram	2.5	
10	Material		PPS (Gray)	
11	Terminal	Pin type	Tin plated	See attached drawing
12	Environmental Protection Regulation		RoHS	
13	Storage life	month	3	3 months preservation at room temp(25±3°C), Humidity40%.

C:ENVIRONMENT TEST

No.	Item	Test condition	Evaluation standard
1	High temp. test	After being placed in a chamber at +85°C for 96 hours.	After the test the part shall meet specifications without any degradation in appearance and performance except SPL. after 4 hours at +25°C, The SPL shall be in ± 10 dBA compared with initial one.
2	Low temp. test	After being placed in a chamber at -30°C for 96 hours.	
3	Thermal shock	The part shall be subjected to 10 cycles. One cycle shall consist of; 	
4	Temp. / Humidity Cycle	The part shall be subjected to 10 cycle and consist of; 	

D: RELIABILITY TEST

No.	Item	Test condition	Evaluation standard
1	Operating life test	<input type="checkbox"/> Applying rated voltage, rated frequency, square wave , 1/2 duty cycle : 1. Ordinary temperature The part shall be subjected to 96 hours at room temperature. 2. High temperature The part shall be subjected to 96 hours at +85°C with 12V applied.	After the test the part shall meet specifications without any degradation in appearance and performance except SPL. after 4 hours at +25°C, The SPL shall be in ± 10 dBA compared with initial one.

TEST CONDITION.

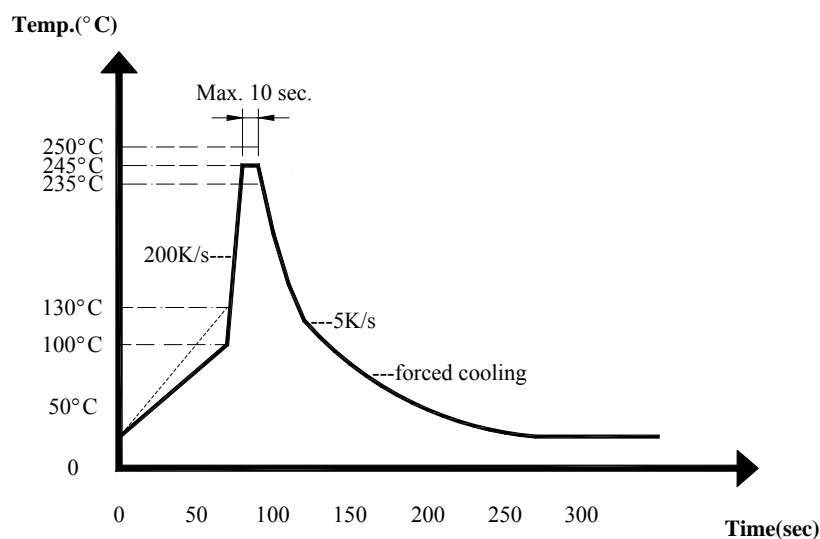
Standard Test Condition : a)Temperature: +5~+35°C b)Humidity:45~85% c)Pressure: 860~1060mbar

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

E:MECHANICAL CHARACTERISTICS

No	Item	Test condition	Evaluation standard
1	Solder ability	Lead terminal are immersed in rosin for 5 seconds and then immersed in Solder bath of $+245\pm 5^{\circ}\text{C}$ for 3 ± 1 second	95% Min. lead terminals shall be wet with solder
2	Soldering Heat Resistance	Lead terminal are immersed in soldering bath of $+260\pm 5^{\circ}\text{C}$ for 5 ± 0.5 Second.	No interference in operation
3	Hand Soldering Heat Resistance	Lead terminal are soldering of $+350\pm 5^{\circ}\text{C}$, 2.0 ± 0.5 Second.	
4	Terminal Mechanical Strength	Apply the terminal with 9.8N(1kg) strength for 10 ± 1 sec.	No damage and cutting off
5	Vibration	The part shall be subjected to a vibration cycle of 10Hz to 55Hz 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).	After the test the part shall meet specifications without any damage in appearance and performance except SPL. The SPL shall be in ± 10 dBA compared with initial one.
6	Drop test	The part only shall be dropped from a height of 75cm onto a 40mm thick wooden board 1 times.	

* Wave Soldering profile of lead-free

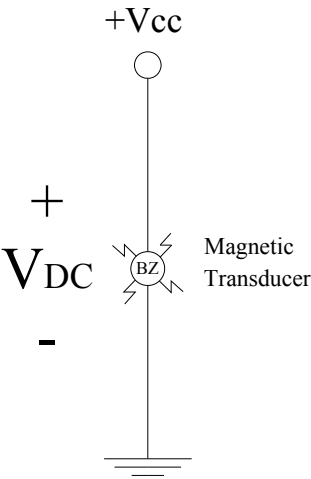


Recommendable wave soldering condition is as follows.

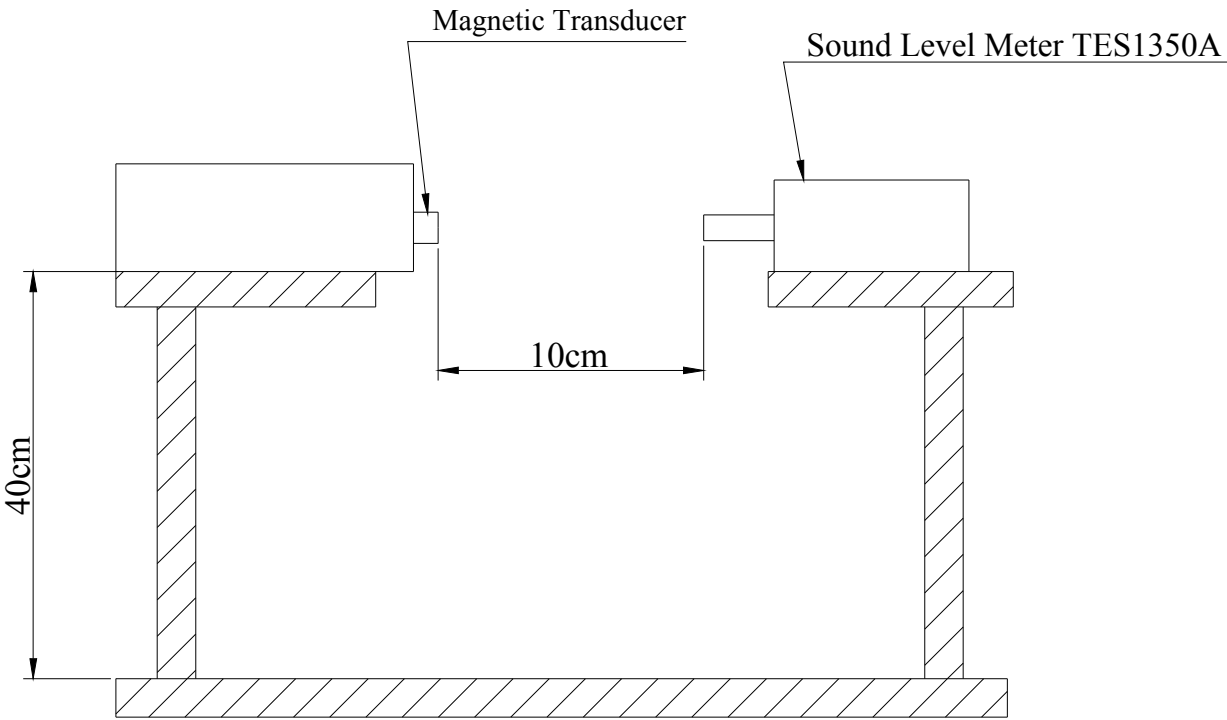
Note 1: It is requested that wave soldering should be executed after heat of product goes down to normal temperature.

Note 2: Peak wave temperature of $235^{\circ}\text{C} \sim 250^{\circ}\text{C}$ maximum of 10 sec. .

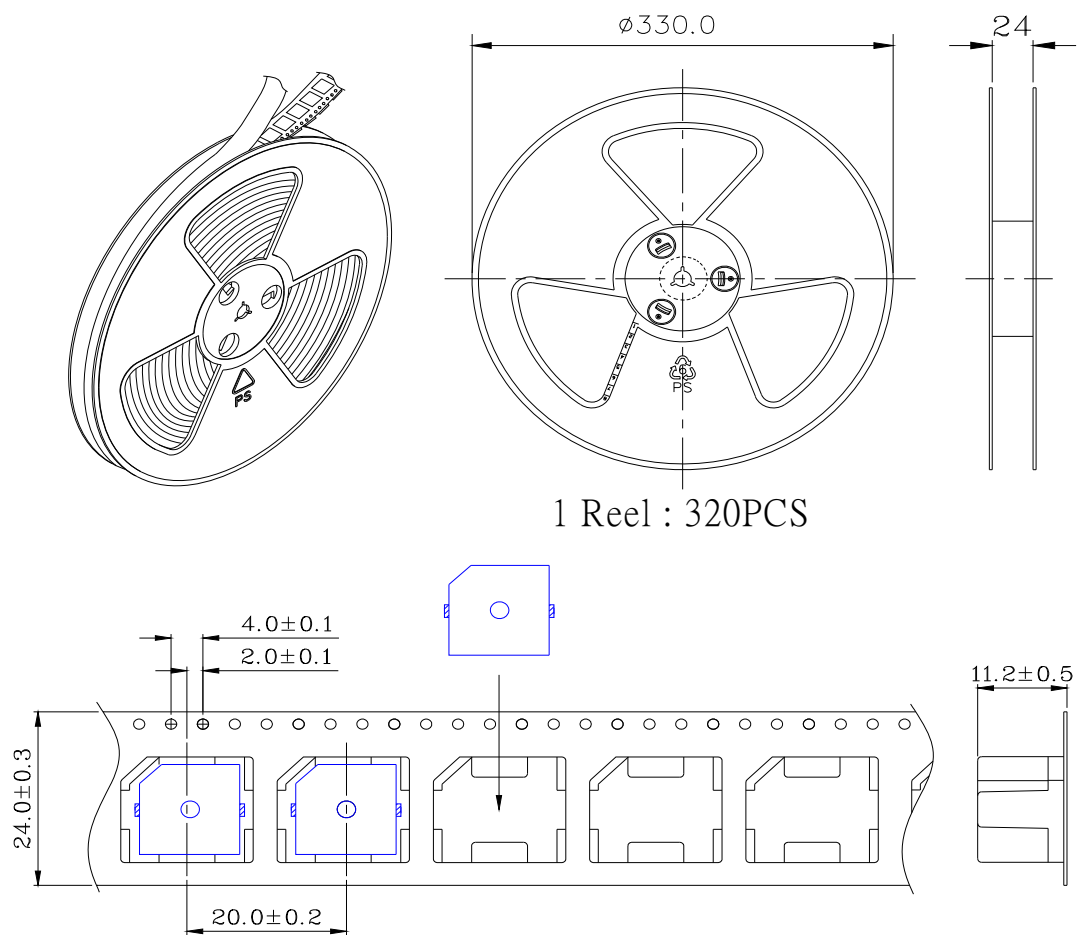
F: MEASUREMENT METHOD



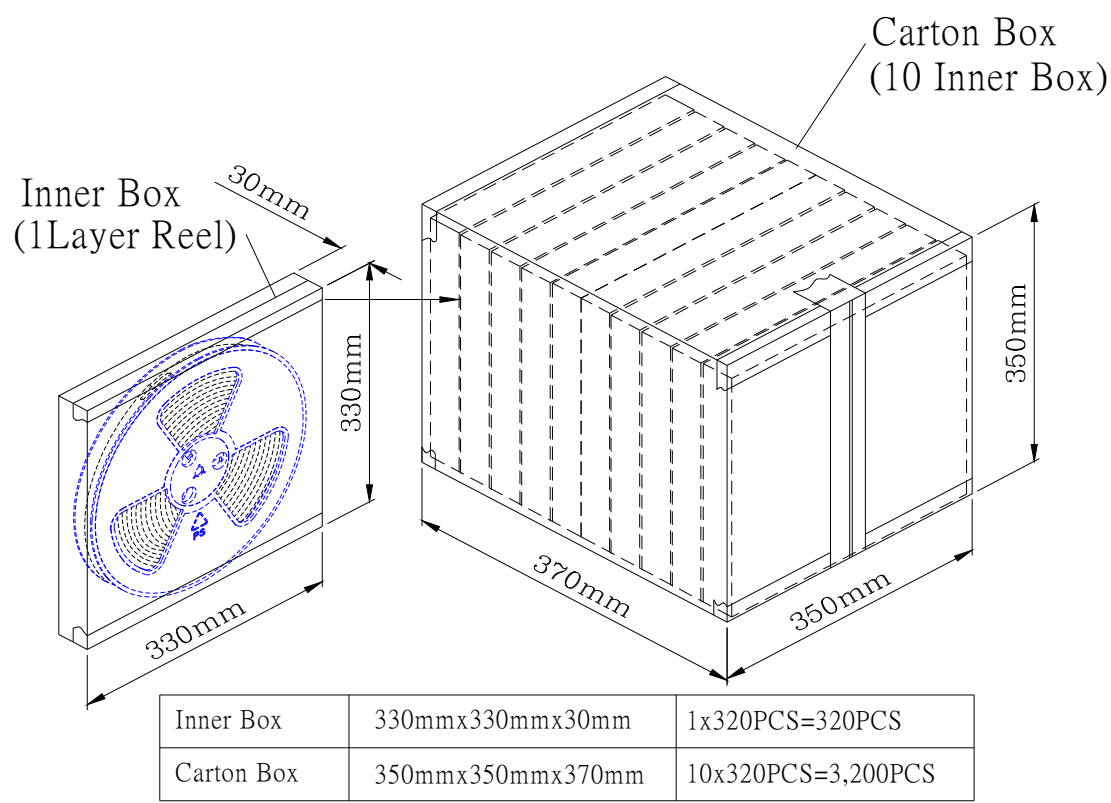
G: INSPECTION FIXTURE



H:



1 Reel : 320PCS



I : DRAWING

