# SPECIFICATION FOR APPROVAL

Customer :

**Description**: Magnetic Transducer

Soberton Part No. : WST-1310S-2

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	Wang Cheng	Song Qi
2012/02/01	2012/02/01	2012/02/01

### A:SCOPE This specification applies magnetic buzzer, WST-1310S-2

#### **B:SPECIFICATION**

■Test condition: TEMP=+25±2 °C			Related humi	dity=65±5% Air pressure:860-1060mbar	
NO.	Item	Unit	Specification	Condition	
1	Rated Voltage	Vo-p	5	Vo-p	
2	Operating Volt	Vo-p	4.0~7.0		
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%.	
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#### **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.	
2	Low temp. test	After being placed in a chamber at $-30^{\circ}$ C for 96 hours.	
3	Thermal shock	The part shall be subjected to 10 cycles. One cycle shall consist of; +85°C -30°C -30°C -30°in -30min -3	After the test the part shall meet specifications without any degradation in appearance and performance except SPL. after 4 hours at $+25^{\circ}$ C, The SPL shall be in $\pm 10$ dBA compared with initial
4	Temp. / Humidity Cycle	The part shall be subjected to 10 cycle and consist of; $+85^{\circ}C$ a, b: 90~98%RH $+25^{\circ}C$ b a b 3hrs 12±0.5hrs 3hrs c 44hrs	

#### **D: RELIABILITY TEST**

No.	Item	Test condition	Evaluation standard		
1	Operating life test	<ul> <li>Applying rated voltage, rated frequency, square wave, 1/2 duty cycle :</li> <li>1. Ordinary temperature The part shall be subjected to 96 hours at room temperature.</li> <li>2. High temperature The part shall be subjected to 96 hours at +85°C with 5V applied.</li> </ul>	After the test the part shall meet specifications without any degradation in appearance and performance except SPL. after 4 hours at $+25^{\circ}$ C, The SPL shall be in $\pm$ 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±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 $+245\pm5^{\circ}$ C for $3\pm1$ second	95% Min. lead terminals shall be wet with solder
2	Soldering Heat Resistance	Lead terminal are immersed in soldering bath of $+260\pm5^{\circ}$ C for $5\pm0.5$ Second.	No interference in
3	Hand Soldering Heat Resistance	Lead terminal are soldering of +350±5°C, 2.0±0.5 Second.	operation
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 $axes(X \land Y \land Z)$ .	After the test the part shall meet specifications without any damage in appearance and performance except SPL. The SPL shall be
6	Drop test	The part only shall be dropped from a height of 75cm onto a 40mm think wooden board 1 times.	in $\pm$ 10 dBA compared with initial one.

# \* 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  $235^{\circ}$ C ~  $250^{\circ}$ C maximum of 10 sec. .





## I : DRAWING

