

SPECIFICATION FOR APPROVAL

Customer :

Description : Magnetic Transducer

SOBERTON Part No. : WST-1212S

Date : 2008-10-08

Customer Model No. :

Date of Approval	
Authorization Signature	

Soberton Inc.

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Approved	Checked	Design
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This specification applies magnetic transducer, WST-1212S

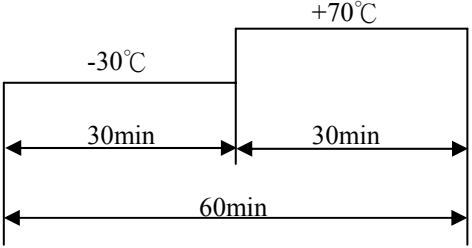
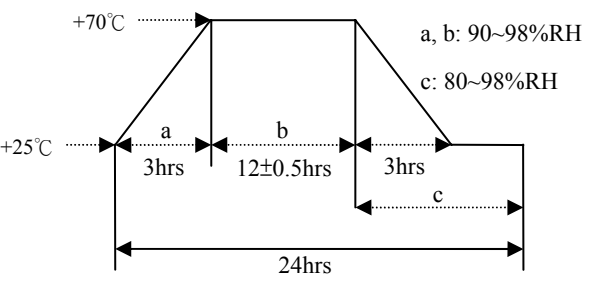
B:SPECIFICATION

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

NO.	Item	Unit	Specification	Condition
1	Rated Voltage	V _{DC}	12.0	
2	Operating Voltage	V _{DC}	10.0 – 14.0	
3	Mean Current	mA	Max. 40	Applying rated voltage.
4	Sound Output	dBA	85 at 10cm	Distance at 10cm(A-weight free air), Applying rated voltage.
5	Rated Frequency	Hz	2300±300	
6	Operating Temp	°C	-20 ~ +60	
7	Storage Temp	°C	-30 ~ +70	
8	Dimension	mm	Φ 12 × H 9.5	See attached drawing.
9	Weight	gram	2.0	
10	Material		PPO (Black)	
11	Terminal		Pin type	See attached drawing
12	Environmental Protection Regulation		RoHS Compliant	
13	Storage life	month	3	3 months preservation at room temp(25±3°C), Humidity40%

C:ENVIRONMENT TEST

3/7

No.	Item	Test condition	Evaluation standard
1	High temp. test	After being placed in a chamber at +70°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	<p>The part shall be subjected to 10 cycles. One cycle shall consist of;</p> 	
4	Temp. / Humidity Cycle	<p>The part shall be subjected to 10 cycle and consist of;</p> 	

D: RELIABILITY TEST

No.	Item	Test condition	Evaluation standard
1	Operating life test	<p>□ Applying rated voltage, rated frequency, square wave, 1/2 duty cycle :</p> <p>Ordinary temperature The part shall be subjected to 96 hours at room temperature.</p>	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.

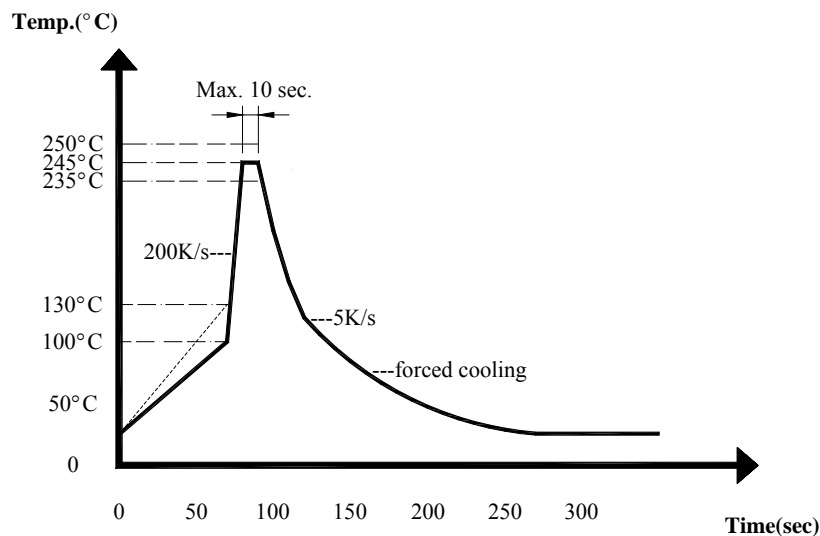
TEST CONDITION.

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

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

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 $+260\pm 5^{\circ}\text{C}$ for 3 ± 0.5 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

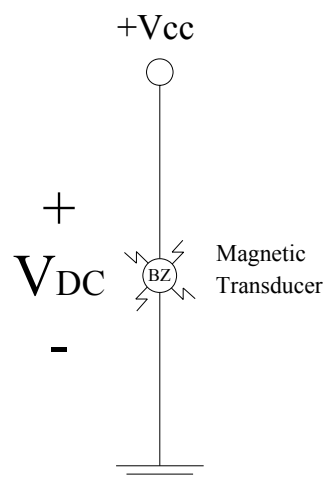


Recommendable wave soldering condition is as follows.

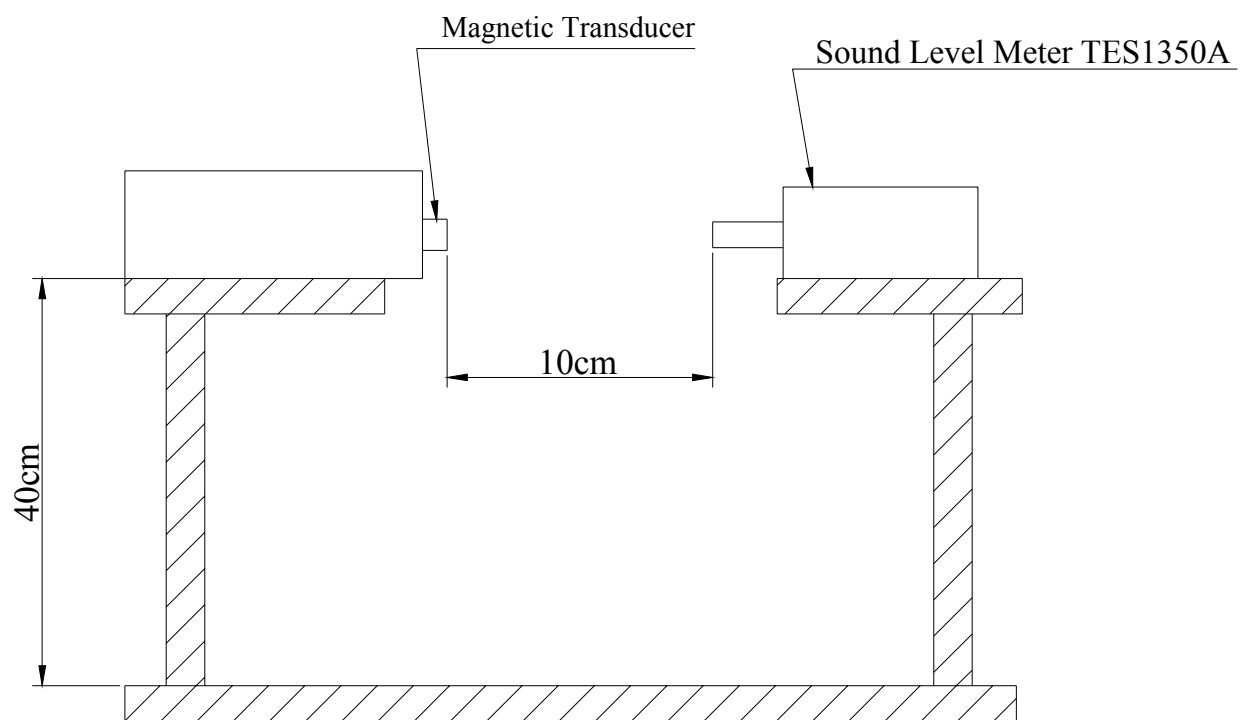
Note 1: It is requested that wave soldering should be executed after heat of product goes down to normal temperature.

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

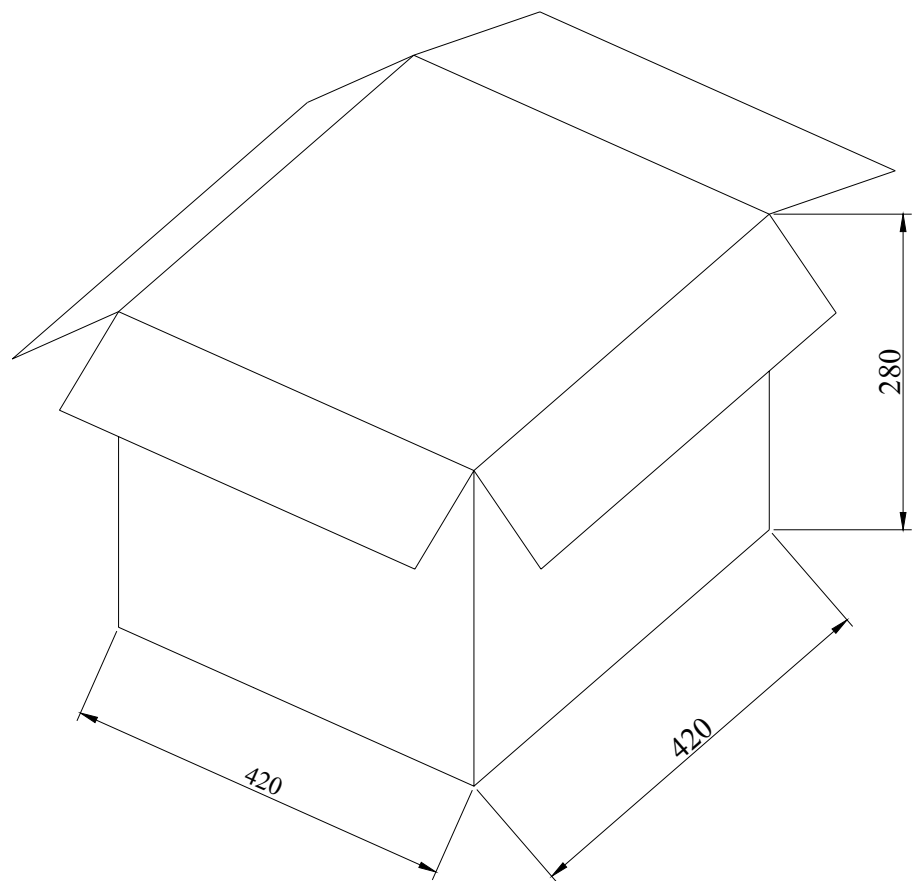
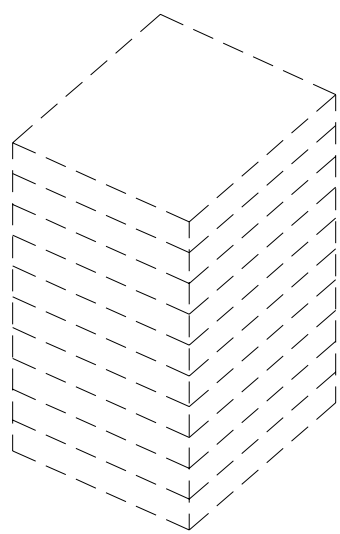
F: MEASUREMENT METHOD



G: INSPECTION FIXTURE



H: PACKING



Packing	Dimension (mm)	Quantity (piece)
1 Tray	190 * 190 * 25	100 pcs
10 Tray	210 * 210 * 220	1,000 pcs
1 Carton	420 * 420 * 280	4,000 pcs

I : DRAWING

