SPECIFICATION FOR APPROVAL

Customer :

Description: Magnetic Transducer

Soberton Part No. : WST-1205S

Date : 2008-10-08

Customer Model No. :

Date of Approval	
Authorization	
Signature	

Doberton Inc.

211 N. First Street Minneapolis, MN. 55401 612-849-6205

Http://www.soberton.com E-mail : info@soberton.com

Approved	Checked	Design	
Ryan	Wang Cheng	Song Qi	
2008/10/01	2008/10/01	2008/10/01	

A:SC	COPE
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This specification applies magnetic transducer, WST-1205S

B:SPECIFICATION

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

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NO.	Item	Unit	Specification	Condition	
1	Rated Voltage	VDC	5.0		
2	Operating Voltage	VDC	4.0-6.0		
3	Mean Current	mA	Max. 40 Peak 120	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	$-30 \sim +70$		
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

No.	Item	Test condition	Evaluation standard
1	High temp. test	After being placed in a chamber at $+70^{\circ}$ C for 96 hours.	
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; +70°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 ± 10 dBA compared with initial
4	Temp. / Humidity Cycle	The part shall be subjected to 10 cycle and consist of; $+70^{\circ}C$ a, b: 90~98%RH $+25^{\circ}C$ a b 3hrs 12±0.5hrs 3hrs 24hrs	one.

D: RELIABILITY TEST

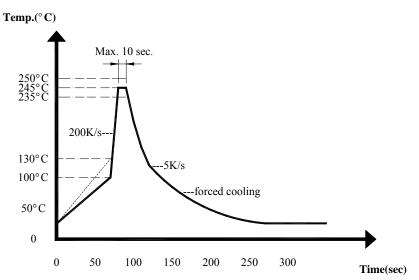
No.	Item	Test condition	Evaluation standard		
1	Operating life test	 Applying rated voltage, rated frequency, square wave , 1/2 duty cycle : Ordinary temperature The part shall be subjected to 96 hours at room temperature. 	After the test the part shall meet specifications without any degradation in 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					

3/7

E:MECHANICAL CHARACTERISTICS

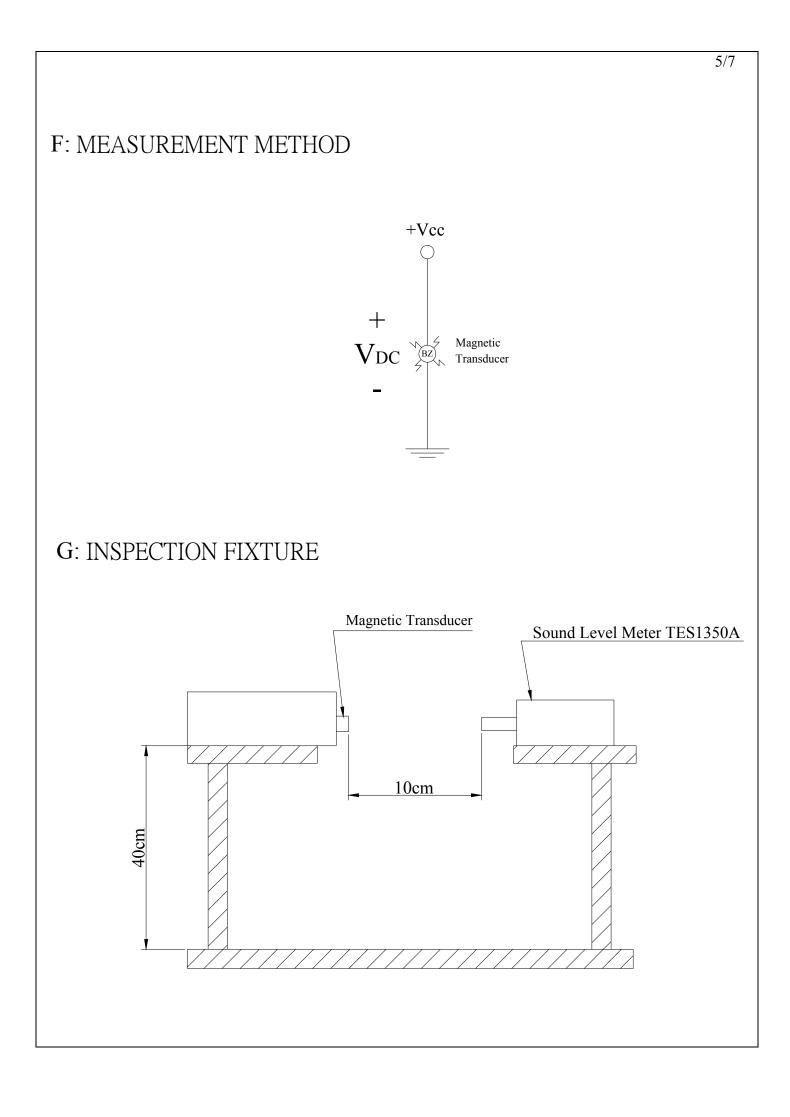
No	Item	Test condition	Evaluation standard	
1	Solder ability	Lead terminal are immersed in rosin for 5 seconds and then immersed in Solder bath of $+260\pm5^{\circ}$ C for 3 ± 0.5 second	95% Min. lead terminals shall be wet with solder	
2	Soldering Heat Resistance	Lead terminal are immersed in soldering bath of $\pm 260\pm5^{\circ}$ C for 5 ± 0.5 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.	

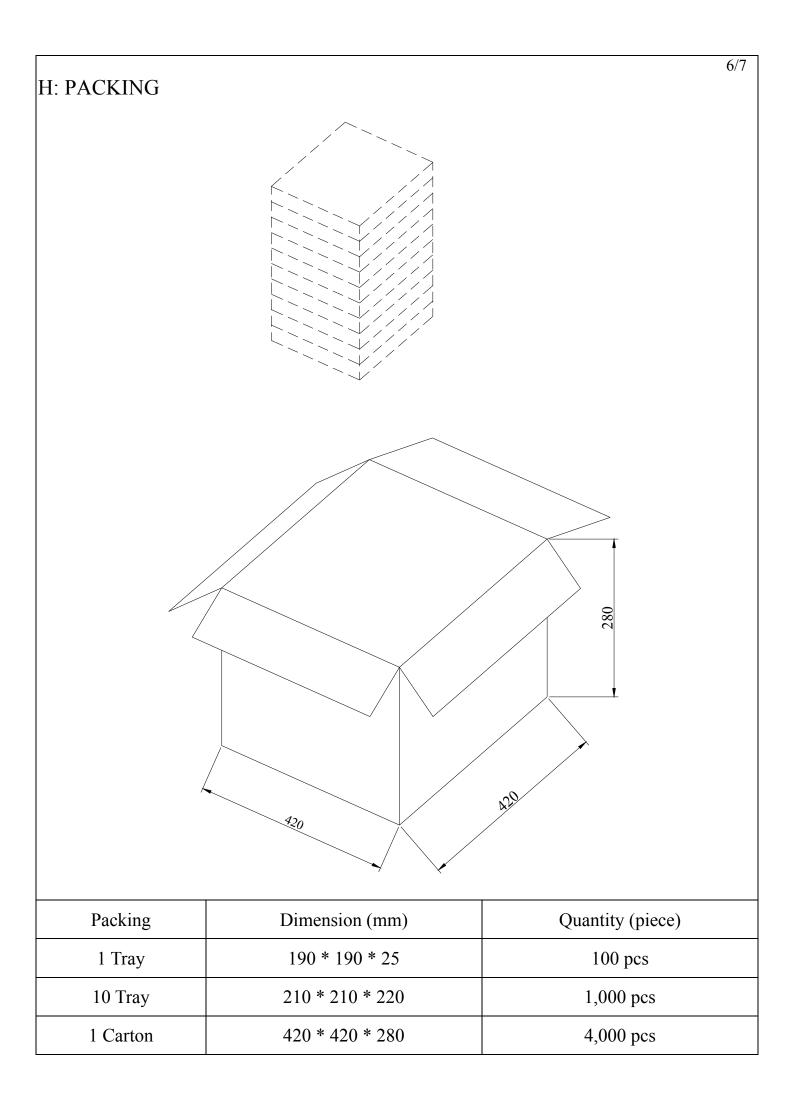
* Wave Soldering profile of lead-free

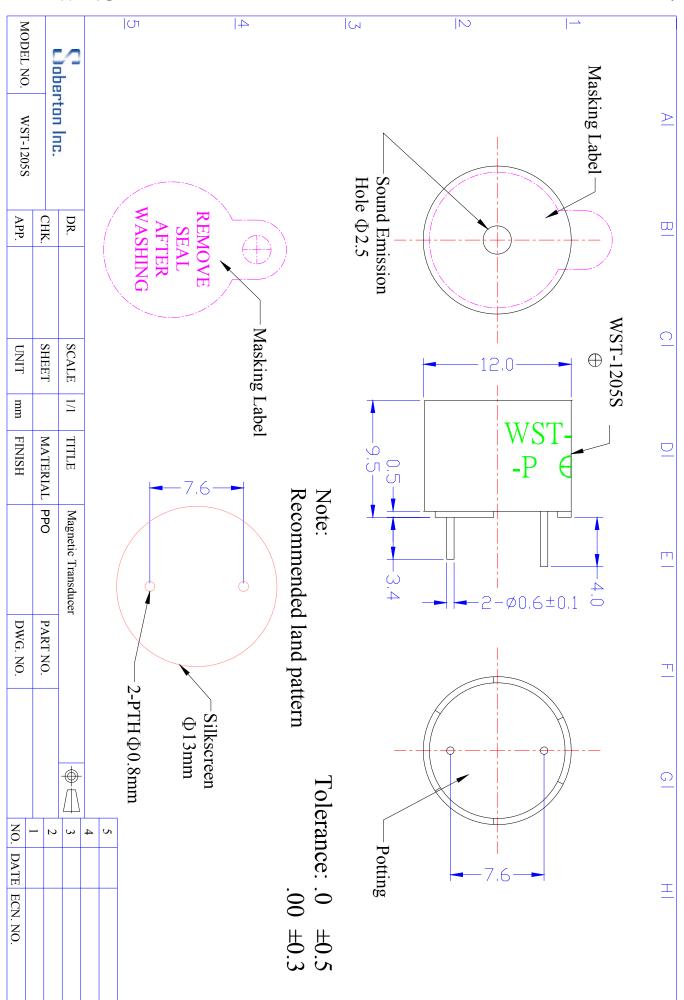


Recommendable wave soldering condition is as follows.
Note 1: It is requested that wave soldering should be executed after heat of product goes down to normal temperature.
Note 2: Peak wave temperature of 235°C ~ 250°C maximum of 10 sec. .

4/7







I : DRAWING

7/7