Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

SPECIFICATION
FOR
APPROVAL

Customer：

Description： Magnetic Transducer

Soberton Part No. ： GT-111P

Date：2009-12-29

Customer Model No. ：

Date of Approval	
Authorization Signature	

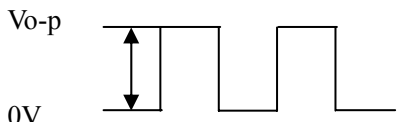
Soberton Inc.

211 N. First Street
Minneapolis, MN. 55401
612-849-6205
info@soberton.com

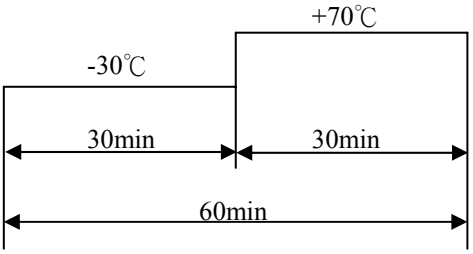
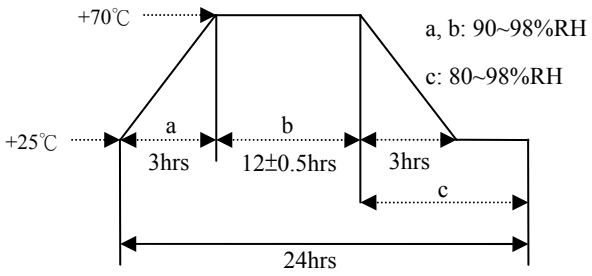
Approved	Checked	Design
Ryan 2009/12/29	Wang Wei Rong 2009/12/29	Xu Hong Wei 2009/12/29

B:SPECIFICATION

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

NO.	Item	Unit	Specification	Condition
1	Rated Voltage	Vo-p	1.5	
2	Operating Voltage	Vo-p	1.0 - 3.0	
3	Mean Current	mA	Max. 10	Applying rated voltage & rated frequency, square wave 1/2 duty
4	Coil Resistance	Ω	50 ± 7.5	
5	Sound Output	dBA	80 at 10cm	Distance at 10cm(A-weight free air), Applying rated voltage & rated frequency, square wave,1/2duty
6	Rated Frequency	Hz	2048	
7	Operating Temp	℃	-20 ~ +60	
8	Storage Temp	℃	-30 ~ +70	
9	Dimension	mm	Φ 12.0 × H 8.5	See attached drawing.
10	Weight	gram	1.6	Magnetic transducer without wire.
11	Material		PPO	
12	Terminal		Pin type	See attached drawing
13	Environmental Protection Regulation		RoHS Compliant	
14	Storage life	month	3	3 months preservation at room temp(25±3℃), Humidity40%

C:ENVIRONMENT TEST

No.	Item	Test condition	Evaluation standard
1	High temp. test	After being placed in a chamber at +70℃ for 96 hours.	After the test the part shall meet specifications without any degradation in appearance and performance except SPL. after 2 hours at +25℃, The SPL shall be in ± 10 dBA compared with initial one.
2	Low temp. test	After being placed in a chamber at -30℃ for 96 hours.	
3	Thermal shock	The part shall be subjected to 5 cycles. One cycle shall consist of;  	
4	Temp. / Humidity Cycle	The part shall be subjected to 5 cycle and consist of;  	

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 2 hours at +25℃,The SPL shall be in ± 10 dBA compared with initial one.

TEST CONDITION.

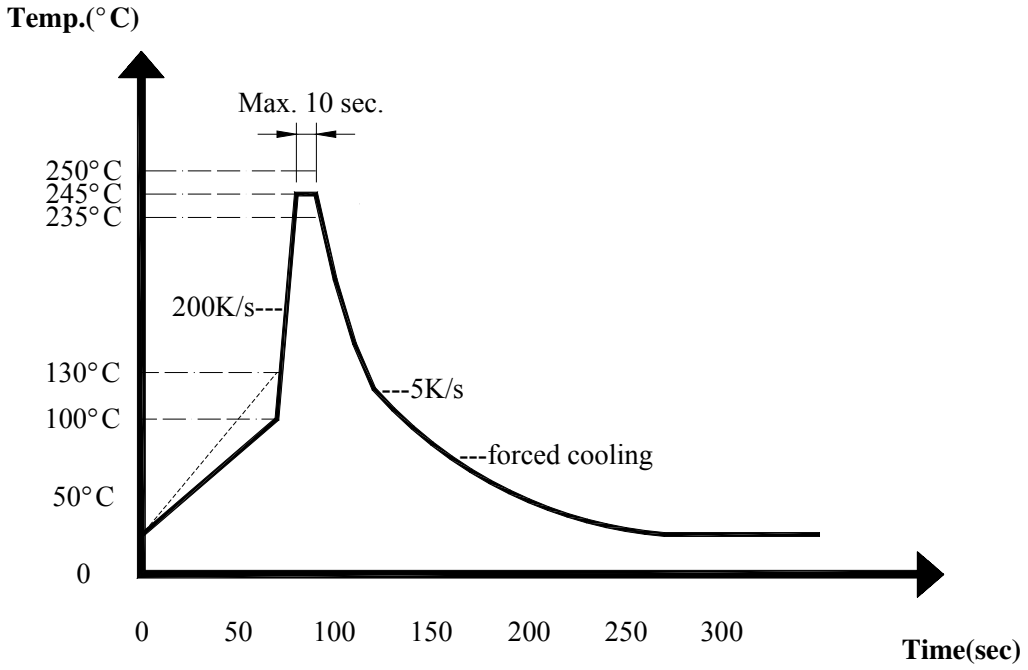
Standard Test Condition : a)Temperature: +5~+35℃ b)Humidity:45~85% c)Pressure: 860~1060mbar

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

E:MECHANICAL CHARACTERISTICS 4/7

No	Item	**Test condition**	Evaluation standard
1	Terminal Mechanical Strength	Apply the terminal with 9.8N(1kg) strength for 10±1 sec.	No damage and cutting off
2	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.
3	Drop test	The part only shall be dropped from a height of 75cm onto a 40mm think wooden board 1 times.	

* Wave Soldering profile of lead-free

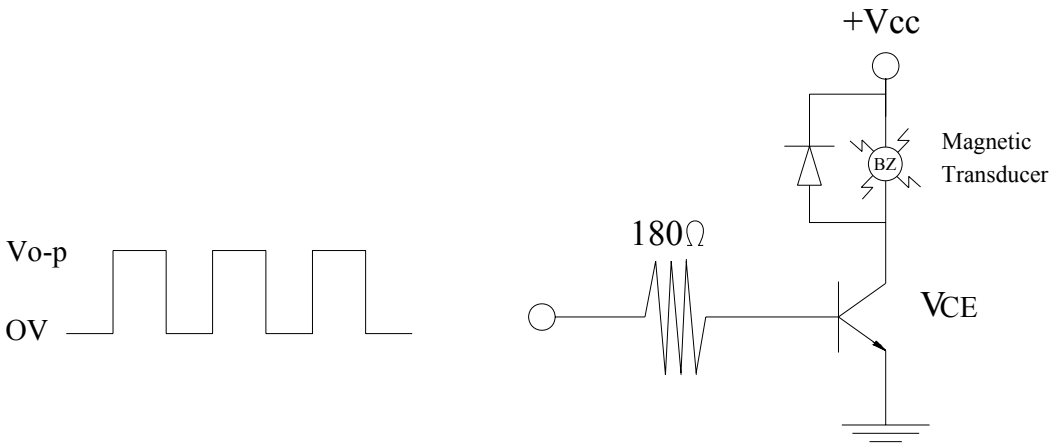


Recommendable wave soldering condition is as follows.

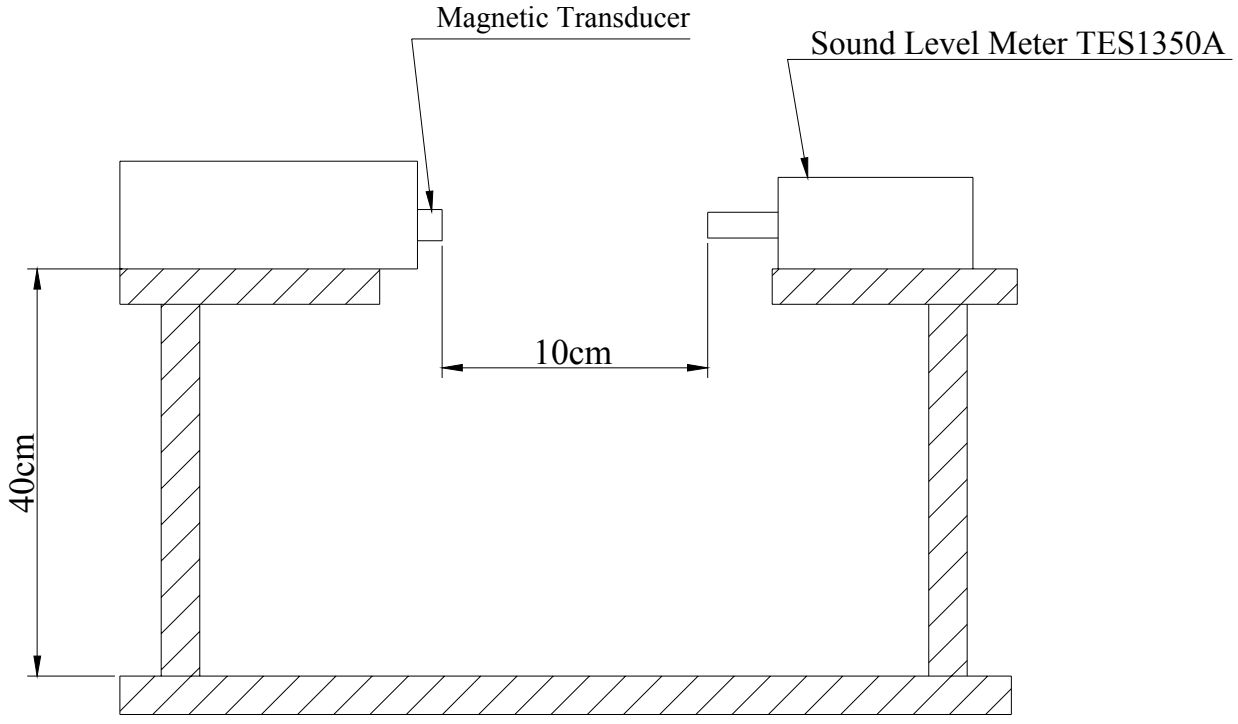
Note 1: It is requested that wave soldering should be executed after heat of product goes down to normal temperature.

Note 2: Peak wave temperature of 235° C ~ 250° C maximum of 10 sec. .

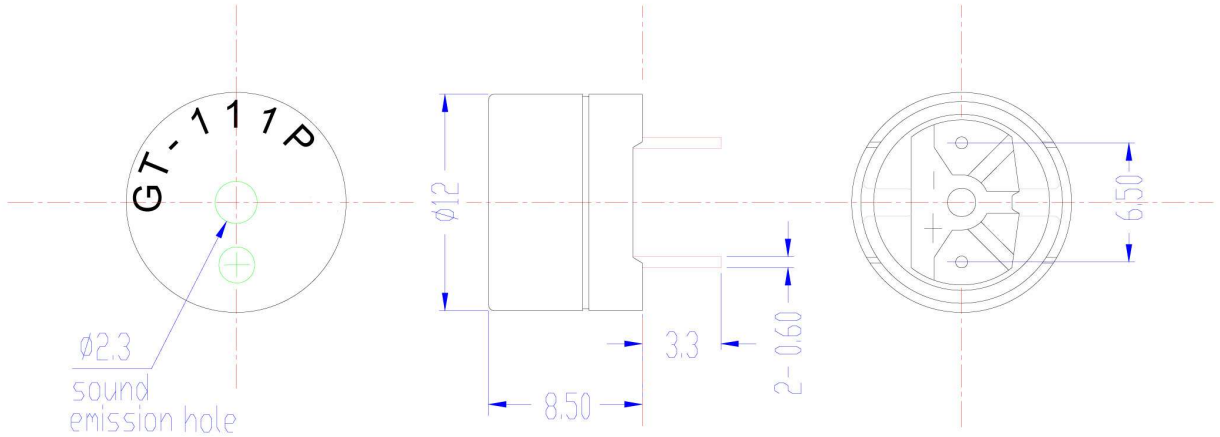
F: MEASUREMENT METHOD



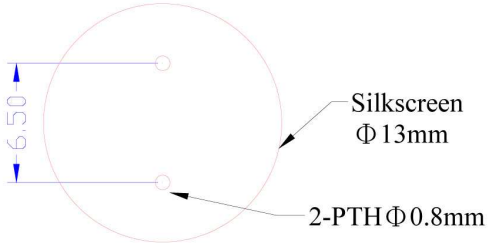
G: INSPECTION FIXTURE



I : DRAWING



Recommended land pattern



Tolerance: ±0.5
Unit:mm

Soberton Inc.		DR.		SCALE	1/1	TITLE	Magnetic Transducer		
		CHK.		SHEET		MATERIAL		PART NO.	
MODEL NO.	GT-111P	APP.		UNIT	mm	FINISH		DWG. NO.	

NO.	DATE	ECN. NO.
5		
4		
3		
2		
1		