

SPECIFICATION

For Electro-Magnet Transducer

Customer			
Customer P/O			
BeStar Model Name	SMT0901H04BS LF		
	SMT0903H04BS LF		
	SMT0905H04BS LF		
Product No.	050701	050702	050703
Issue No.	BS/TET01.157B		
Issue Date	06/11/11		

Approval:

- 1.Characteristics
- 2.Dimension
- 3.Reliability test
- 4.Surface Mounting Condition
- 5.Packing
- 6.History change record

Drawn by	Checked by	Approved by	Customer approved
韩学慧	邵凯	郭敏	

For conform to the European Union Directive on the Restriction of Hazardous Substances(RoHS), this type of productions forbid use all the hazardous substances as follow:

Lead
Cadmium
Mercury
Hexavalent chromium
Polybrominated biphenyls (PBB)
Polybrominated diphenyl ethers (PBDE)



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SMT0901H04BS LF
SMT0903H04BS LF
SMT0905H04BS LF



1. Characteristic

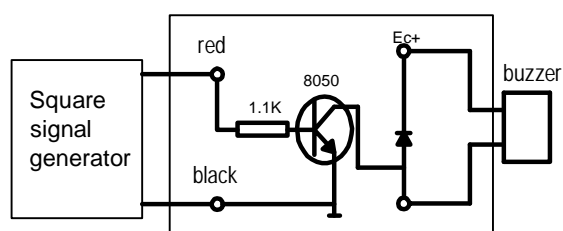
★Electrical and Mechanical Characteristics

No.	Item	Specifications		
		SMT0901H04BSLF	SMT0903H04BSLF	SMT-0905H04BSLF
1	Rated Voltage(Vp-p)	1.5V	3	5
2	Operating Voltage(Vp-p)	1~2V	2~4	4~6
3	a) Current Consumption(mA)	Max. 110	Max. 80	
4	a) Sound Pressure Level (dB)at 10cm	min.80	min.85	
5	Rated Frequency(Hz)	2730		
6	Coil Resistance(ohm)	5± 2	16± 3	30± 3
7	Operating Temperature (° C)	-20...+60		
8	Storage Temperature (° C)	-30...+70		
9	Weight(g)	0.6		
a)Value applying at rated voltage(2730Hz,1/2duty,square wave)				

1.1 Test method:

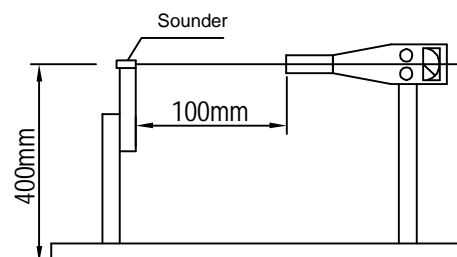
1.31.Recommended Circuit

the following are examples of externally driven circuits.



1.32.Standard test Fixture

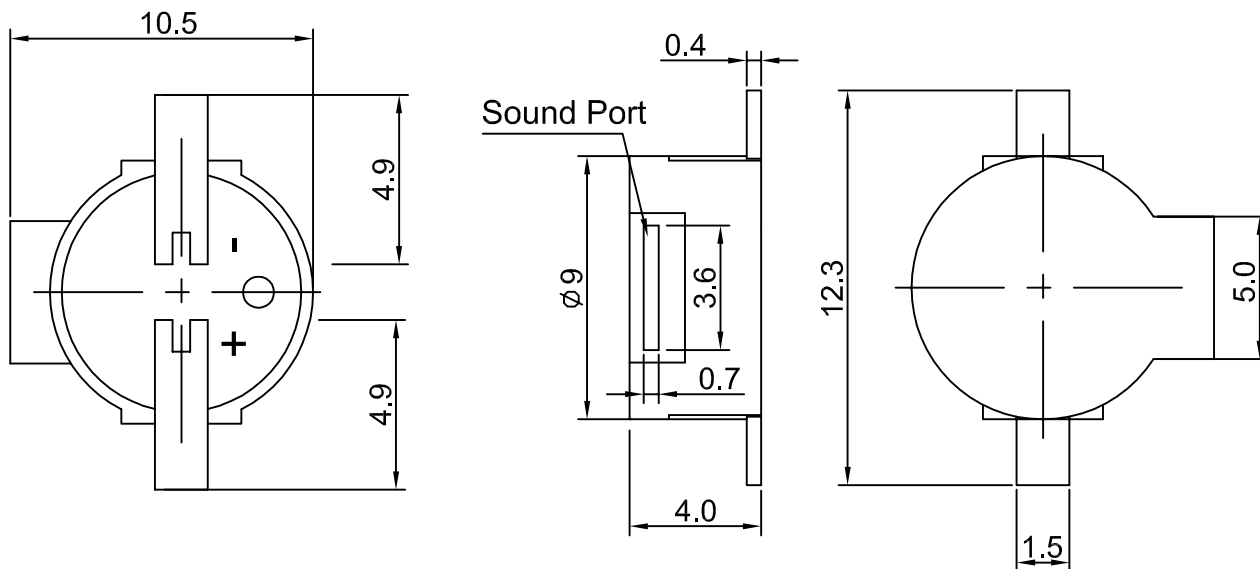
No reaction in space with in 400mm in all direction



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B	06/11/11	韩学慧	Rohs	Drawn by:	韩学慧	
A	03/10/27	王善梅		Checked by:	邵 凯	
REV.	Date	Drawn	Note	Approved by:	程久生	
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2.Dimension



Tolerance: ± 0.3
Unit: mm

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3. Reliability Test

3.1 high temperature test

Temperature +85 °C
Duration 48hrs

3.2 low temperature test

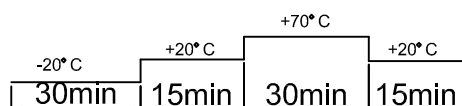
Temperature -40 °C
Duration 48hrs

3.3 life test in normal temperature

Power supply rated voltage
Duration 1000hrs

3.4 temperature cycle test

Cycles 5



3.5 Humidity test

Temperature +40° C
Relative Humidity 93%
Duration 48hrs

all these tests above should be measured after leaving normal temperature for 2hrs.

3.6 Drop test

Height 70cm
(to 10mm thickness woodenboard)
Direction 3

3.7 Vibration Test

Vibration Frequency Range 10~55~10Hz/min
Vibration Amplitude 1.5mm
Direction x.y&z axis
Duration 2hrs

3.8 Solderability

Temperature 245± 5 °C
Duration 3± 0.5sec

Notice: All specification must be satisfied in this condition.

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4.Surface Mounting Condition

In automated mounting of The SMD Sound Transducers on printed circuit boards,any bending,expanding and pulling forces or shocks against the SMD Sound Transducers shall be kept minimum to preven them from electrical failures and mechanical damages of the devices.

Soldering(Reflow)

(1)Solderings of The SMD Sound Transducers shall conform to the soldering conditions in the individual specifications.

(2)The SMD Sound Transducers are designed for"Reflow Solderings"

(3)In the reflow solderings,too high soldering temperatures and too large tempearture gradient such as rapid heating or cooling may cause electrical failures and mechanical damages of the devices.

Follwing soldering conditions are recommend;Refer to Fig.1

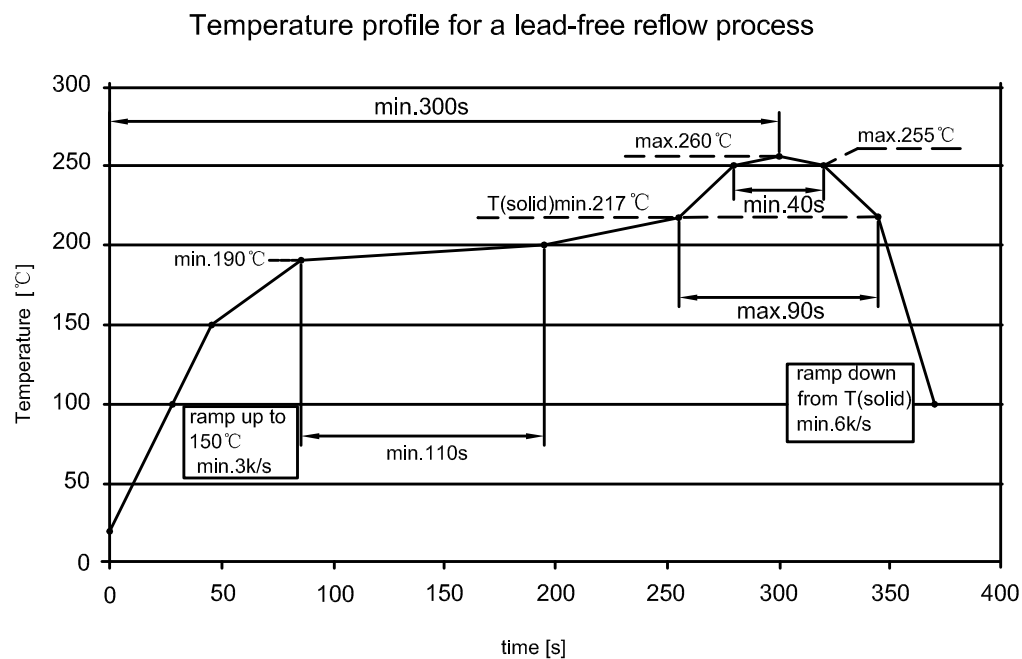


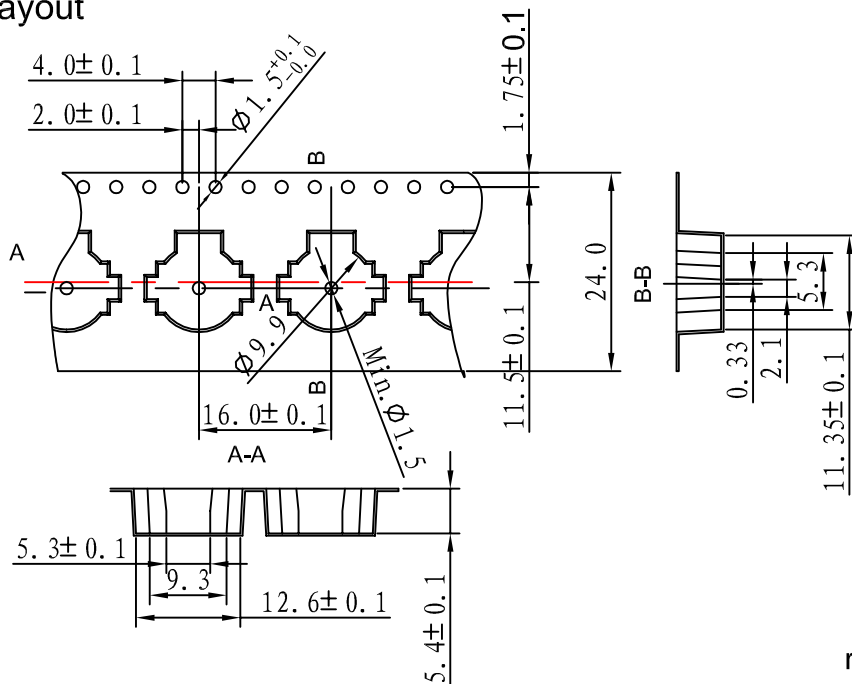
Fig. 1 Recommended soldering Temperature-Time profile (Reflow soldering)

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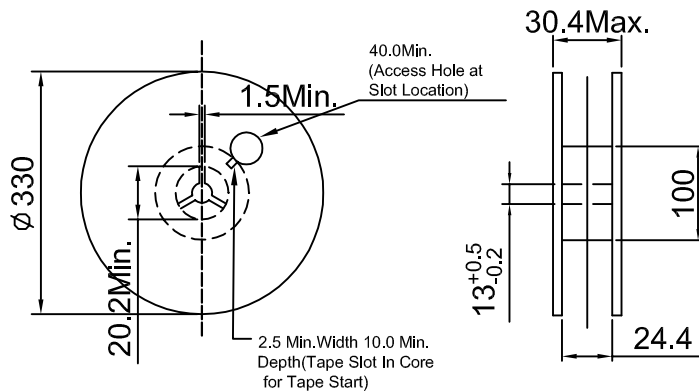
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5. Packing

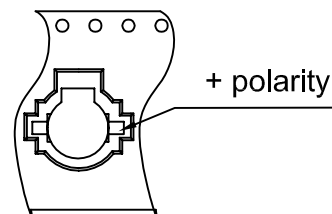
5.1 Tape layout



5.2 Reel



reel direction



5.3 Packing Quantity :800 pcs per reel

5 reels per carton (Total 4000 pcs)
carton size 38x28x37

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6. History change record

[illegible]

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