

SPECIFICATION FOR ELECTRO-MAGNET TRANSDUCER

Customer	
Customer P/N	
BeStar Model Name	SMT7575-03H2.5 LF
Product No.	051100
Issue No.	BS/TET01.117D
Issue Date	07/01/11

Approval:

- 1.Characteristics
- 2.Dimension
- 3.Reliability Test
- 4.Surface Mounting Condition
- 5.Tape on Reel Packing
- 6.Notice
- 7.History change record

Drawn by	Checked by	Approved by	Customer approved
韩学慧	邵凯	程文生	

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)



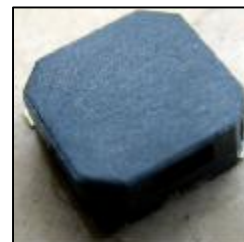
BESTAR ELECTRONICS INDUSTRY CO.,LTD
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SMT7575-03H2.5 LF

1. Characteristics

1.1 Features

1. SMD;thinner , smaller size
2. High S.P.L.; and clear sound
3. Reflowable;RoHS compliant
4. Tape & Reel supply
5. Minimum quantity (one reel): 1000 pcs.



1.2 Electrical and Mechanical Characteristics

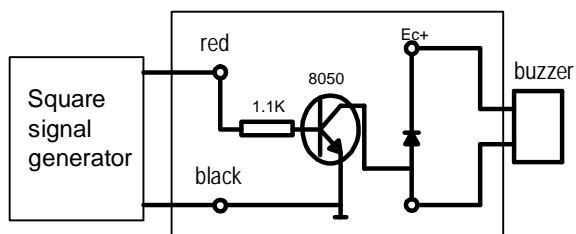
No.	Item	Specifications
1	Rated Voltage	3.6Vo-p
2	Operating Voltage	2.5...4.5 Vo-p
3	Current	Max.100mA
4	Sound Output (at 10cm)	Min.85dB
5	Rated Frequency	2700Hz
6	Coil Resistance	15±3 ohm
7	Operating Temp.	-40...+85°C
8	Storage Temp.	-40...+85°C
9	Weight	0.4g
10	Housing material	Black LCP
11	Terminal material	Brass

※Current/Sound Output:value applying rated voltage (2700Hz,1/2 duty,square wave)

1.3 Test method:

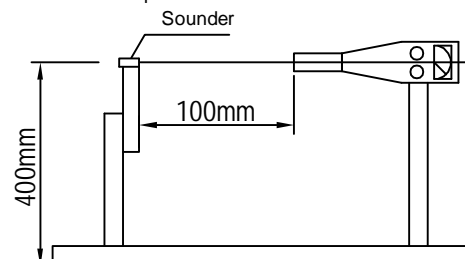
1.31.Recommended Circuit

the following are examples of externally driven circuits.



1.32.Standard test Fixture

No reaction in space with in 400mm in all direction

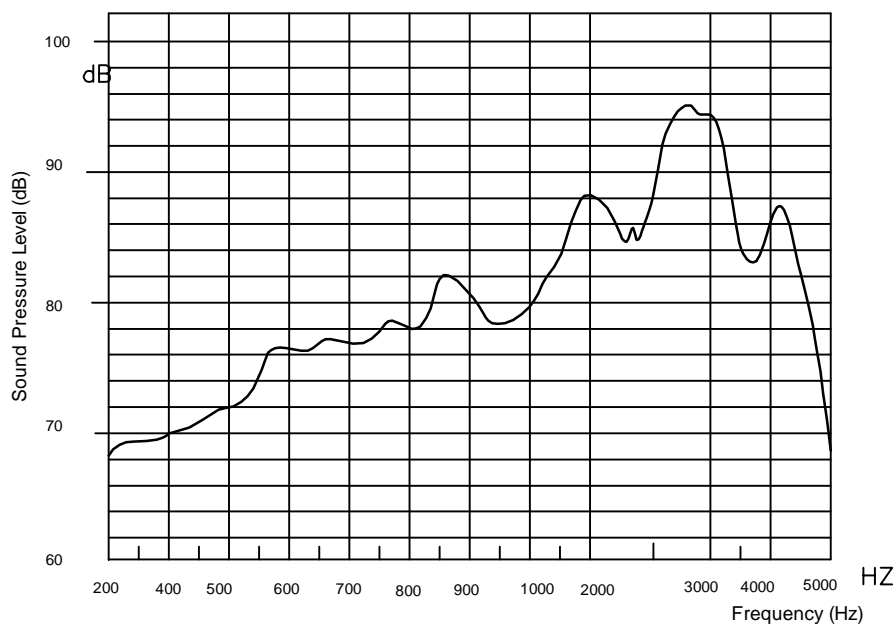


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C	06/02/15	王善梅	ROHS	Drawn by:	韩学慧	
B	04/06/03	王善梅	Add weight and terminal material	Checked by:	邵 凯	Transducer
Rev.	Date	Drawn	Note	Approved by:	程久生	

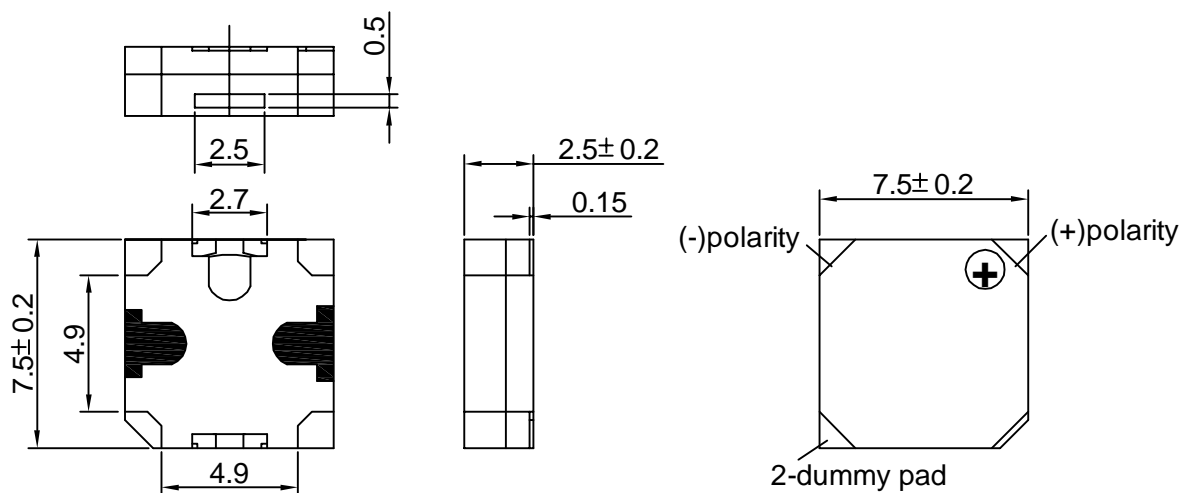
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1.4 Frequency Response(Square wave 3.6Vo-p 10cm)



2.Dimension



Tolerance: $\pm 0.2\text{mm}$

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3. Reliability Test

3.1 High temp. storage life test

Temperature +85°C
Duration 240hrs

3.2 Low temp. storage life test

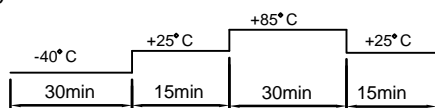
Temperature -40°C
Duration 240hrs

3.3 Life test in normal temperature

Power supply Rated voltage
Duration 1000hrs

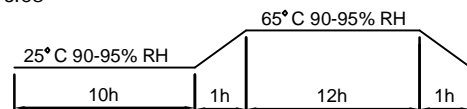
3.4 Temperature shock test

Cycles 5



3.5 Humidity cycle test

Cycles 5



3.6 High temp. life test

Temperature +85°C
Duration 96hrs

3.7 Low temp. life test

Temperature -20°C
Duration 96hrs

All these tests above should be measured after leaving normal temperature for 4hrs.

3.8 Vibration Test

Vibration Frequency 50~100~50Hz
Time 15min
Acceleration 5g
Direction x.y & z 2h (total 6hrs)

3.9 Drop test

Height 70cm(drop to concrete floor)
Direction one time in each 6 planes(total of 6 times)

3.10 Solderability

Temperature of soldering pot 255°C ± 5
Duration 2 ± 0.5sec

3.11 Pin lead strength

Force 10N
Duration 10 ± 1sec

Notice: All specification must be satisfied in this condition except SPL. SPL shall be 82dB or more.

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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

Temperature profile for a lead-free reflow process

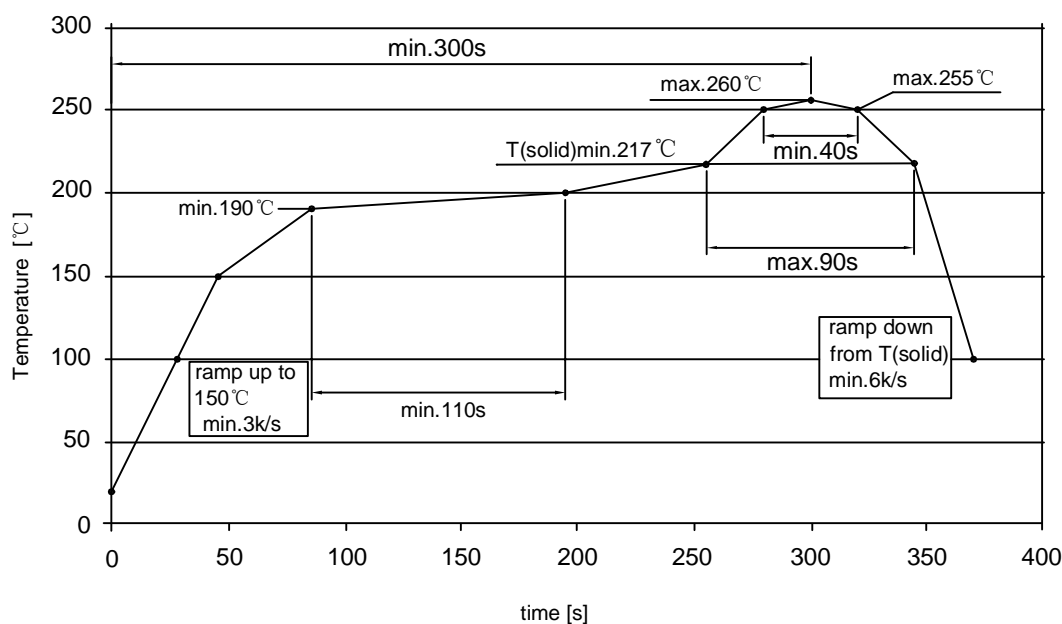


Fig. 1 Recommended soldering Temperature-Time profile (Reflow soldering)

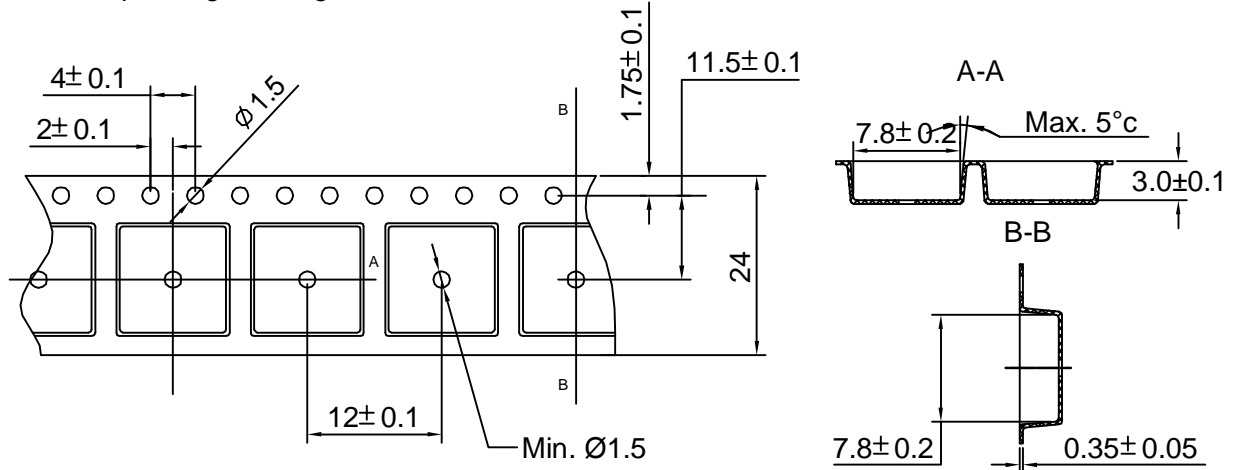
Notice: All specification must be satisfied in this condition except SPL. SPL shall be 82dB or more.

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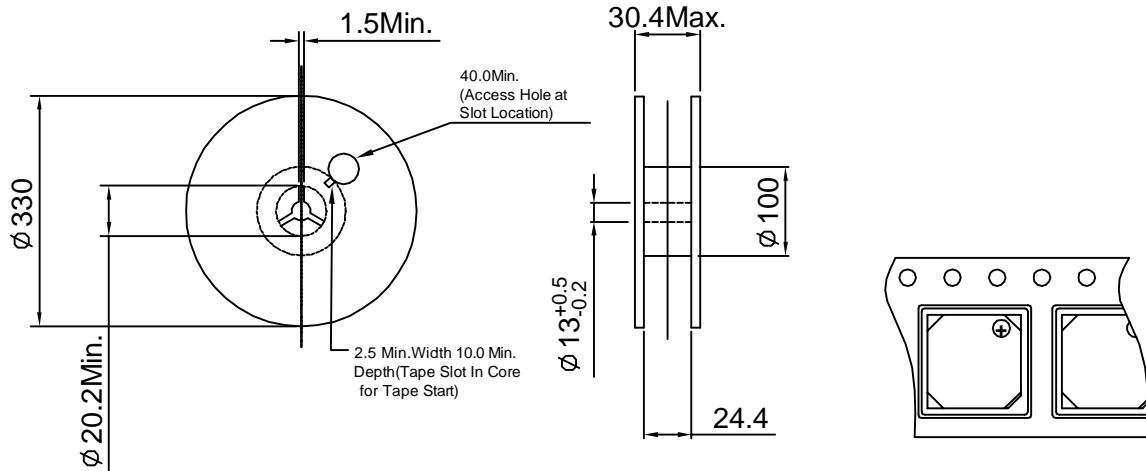
5. Tape on Reel Packing

5.1 packing drawing



note:

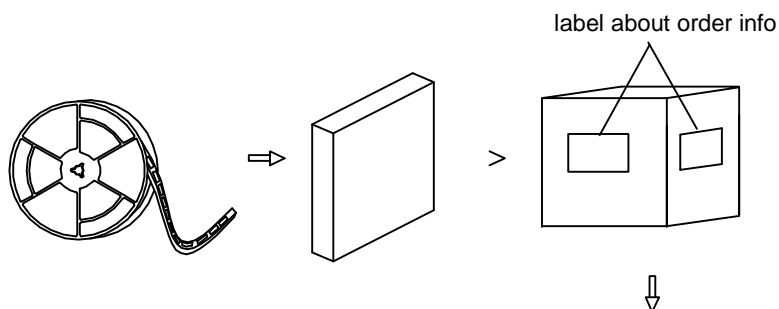
The cover film peel strength force 0.1-0.7N
The cover film peel speed 300mm/min.



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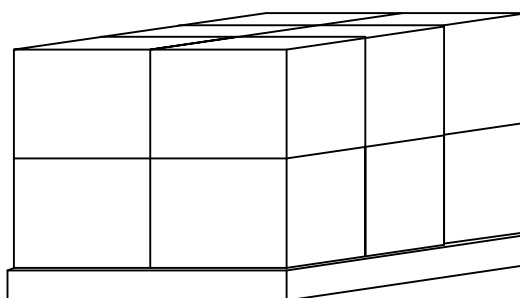
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5.2 packing quantity

- 5.2.1 1000pcs/reel
- 5.2.2 5reel/carton
- 5.2.3 5000 pcs/carton in total
- 5.2.4 carton size 38x28x37cm
- 5.2.5 12carton/tray
- 5.2.6 tray size 85x77x74cm



6. Notice

6.1 The products mustn't be washed

6.2 Storage Condition

The products should be stored in the room ,where the temperature/humidity is stable. And avoid such places where there are large temperature changes. Please store the products at the following conditions:

Temperature: -10 to + 40 °C Humidity: 15 to 85% R.H.

6.3 Expire Date on Storage

Expire date (Shelf life) of the products is six months after delivered under the conditions of a sealed and an unopened package. Please use the products within six months after delivered.

If you store the products for a long time (more than six months), use carefully because the products may be degraded in the solderability and/or rusty. Please confirm solderability and characteristics for the products regularly.

6.4 Notice on Product Storage

(1) Please do not store the products in a chemical atmosphere (Acids, Alkali, Bases, Organic gas, Sulfides and so on), because the characteristics may be reduced at quality, and/or be degraded in the solderability due to the storage in a chemical atmosphere.

(2) Please use the products immediately after the package is opened, because the characteristics may be reduced at quality, and/or be degraded in the solderability due to storage under the poor condition.

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7. History change record

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