

SPECIFICATION

For Electro-Magnet Transducer

Customer	
Customer P/N	
BeStar Model Name	SMT8585-03H3.6-06LF
Product No.	050115
Issue No.	BS/TET01.490A
Issue Date	07/08/01

Approval:

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

Drawn by	Checked by	Approved by	Customer approved
魏奉玲	陶红仲	张秀琴	

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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SMT8585-03H3.6 -06LF

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.



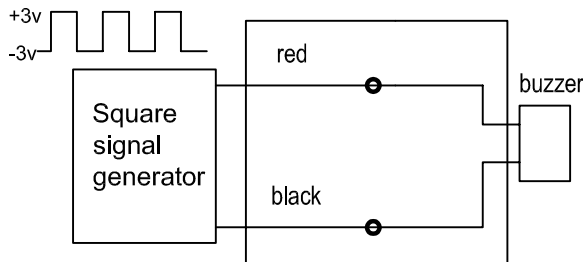
1.2 Electrical and Mechanical Characteristics

No.	Item	Specifications
1	Rated Voltage	6Vp-p
2	Operating Voltage	6...9 Vp-p
3	Rated Current	max.110mA
4	Sound Output (at 10cm)	min.85dB
5	Resonance Frequency	2730Hz
6	Coil Resistance	18±3ohm
7	Operating Temp.	-40...+85°C
8	Storage Temp.	-40...+85°C
9	Housing Material	LCP
10	Weight	0.5 g
Current/Sound Output:value applying rated voltage :		
		2730Hz,6.0Vp-p,1/2 duty,square wave

1.3 Test method:

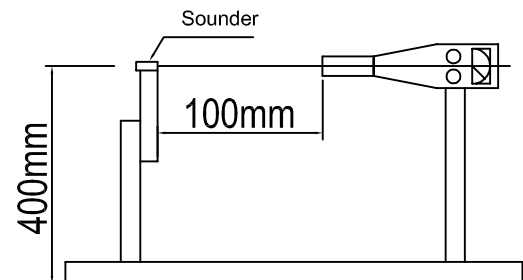
1.31.Recommended Circuit

the following are examples of externally driven circuits.



1.32.Standard test Fixture

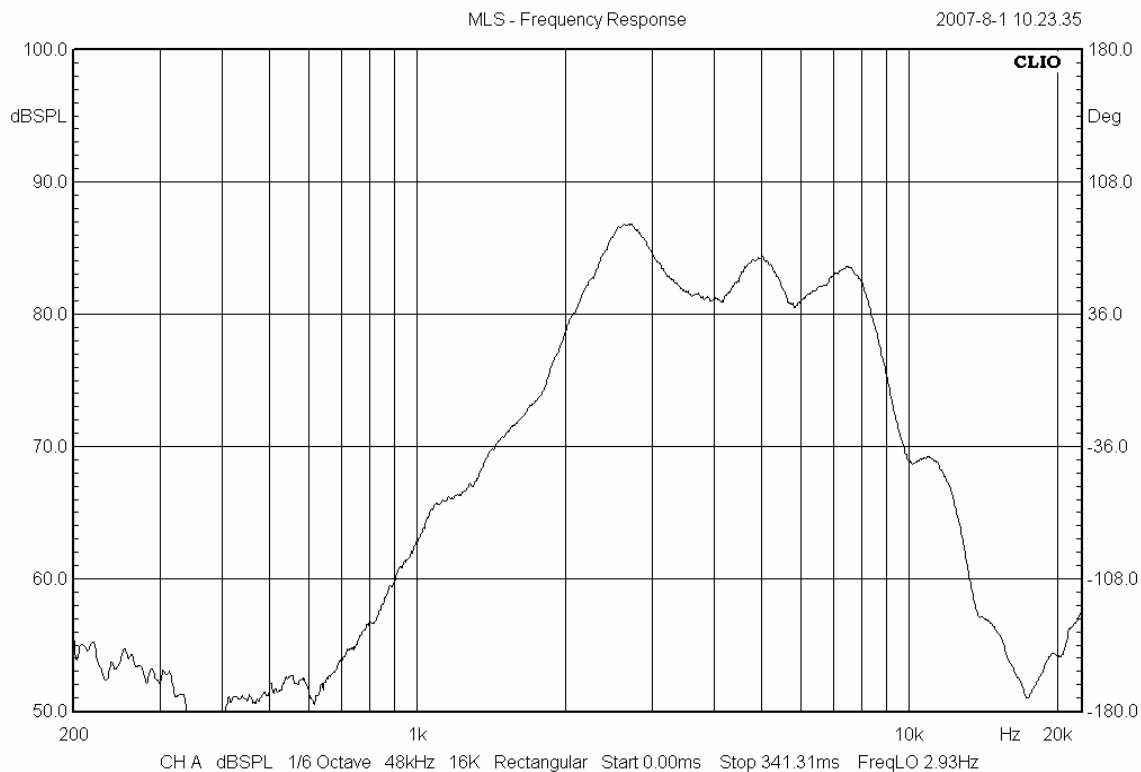
No reaction in space with in 400mm in all direction



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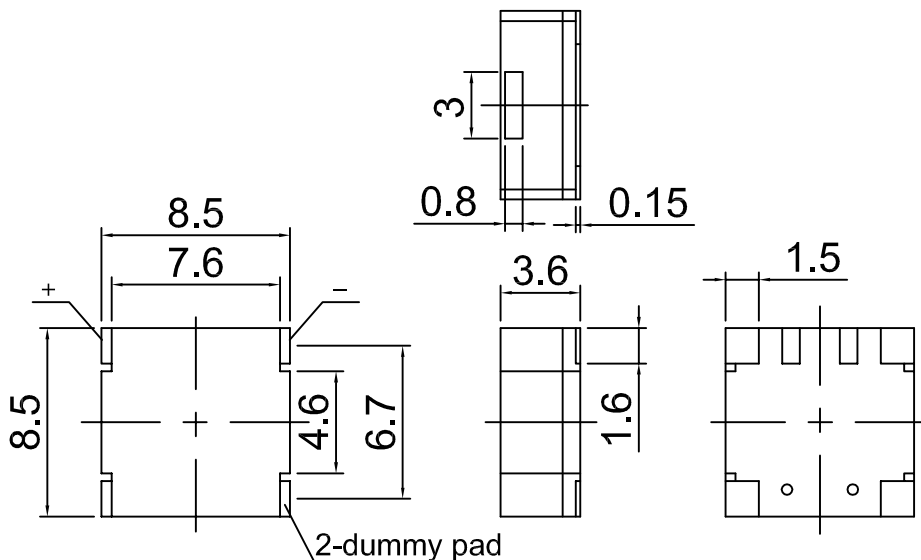
1.4 Frequency Response (Square wave 6Vp-p 10cm)



2. Drawing

Tolerance: ± 0.2

Unit: mm



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3. Reliability Test

3.1 Storage in high temp.

Temperature +85° C

Duration 96hrs

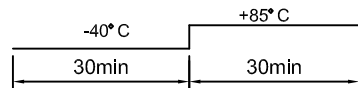
3.2 Storage in low temp.

Temperature -40° C

Duration 96hrs

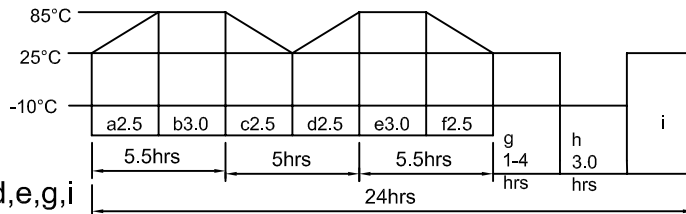
3.3 Temperature cycles test

Cycles 50



3.4 Humidity cycle test

Cycles 5



a,b,d,e,g,i

Make this test without applying power, then expose to the room temperature for 2 hours.

3.5 Drop test

height 750mm (from the surface of 40mm thick woodenboard)

times 9

direction 3(X,Y&Z)

3.6 Solderability

temperature 260±5° C

duration 5.0±0.5s

3.7 Solderheat Resistance

temperature 260±5° C

duration 40s

3.8 Lead pull

force 9.8N

duration 10±1s

3.9 Operation life

a) Ordinary temperature (25±10° C)

power 3V (2730Hz)

duration 1000hrs

b) High temperature (85° C)

power 5V (2730Hz)

duration 500hrs

c) Low temperature (-40° C)

power 2V (2730Hz)

duration 500hrs

Notice: All specification must be satisfied in this condition except SPL. SPL shall be 77dB 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 prevent 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 temperature gradient such as rapid heating or cooling may cause electrical failures and mechanical damages of the devices.

Following soldering conditions are recommended; Refer to Fig.1

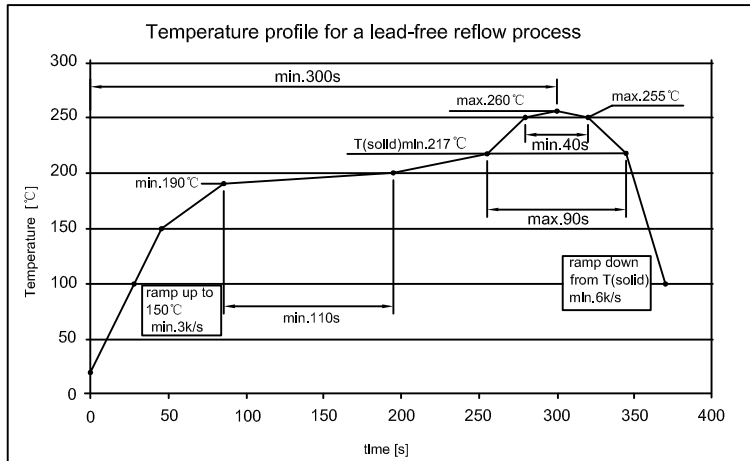
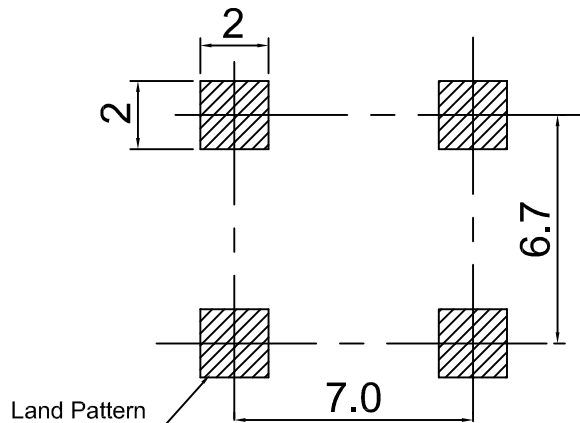


Fig. 1 Recommended soldering Temperature-Time profile (Reflow soldering)

5. Soldering Pattern



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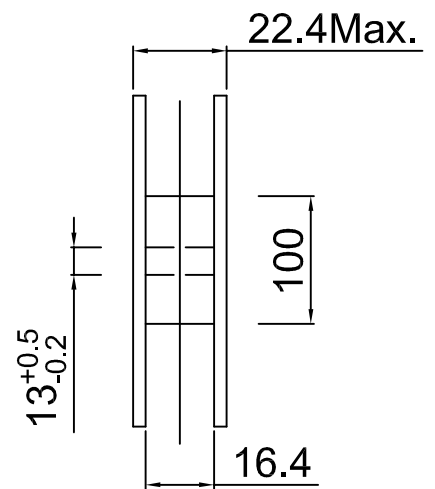
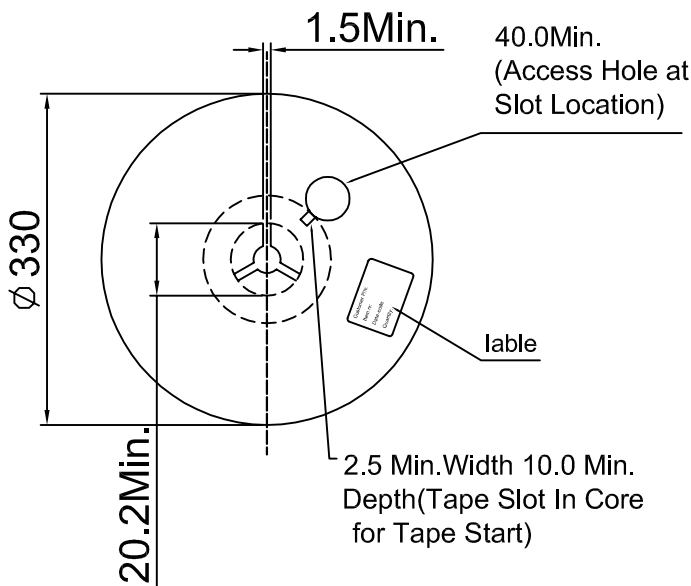
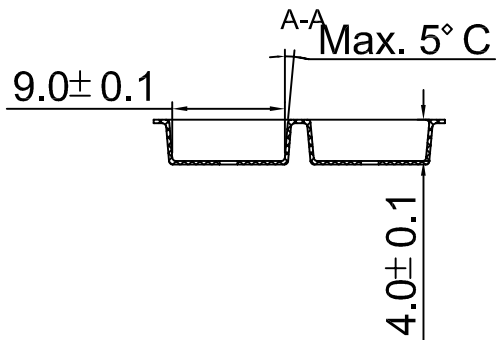
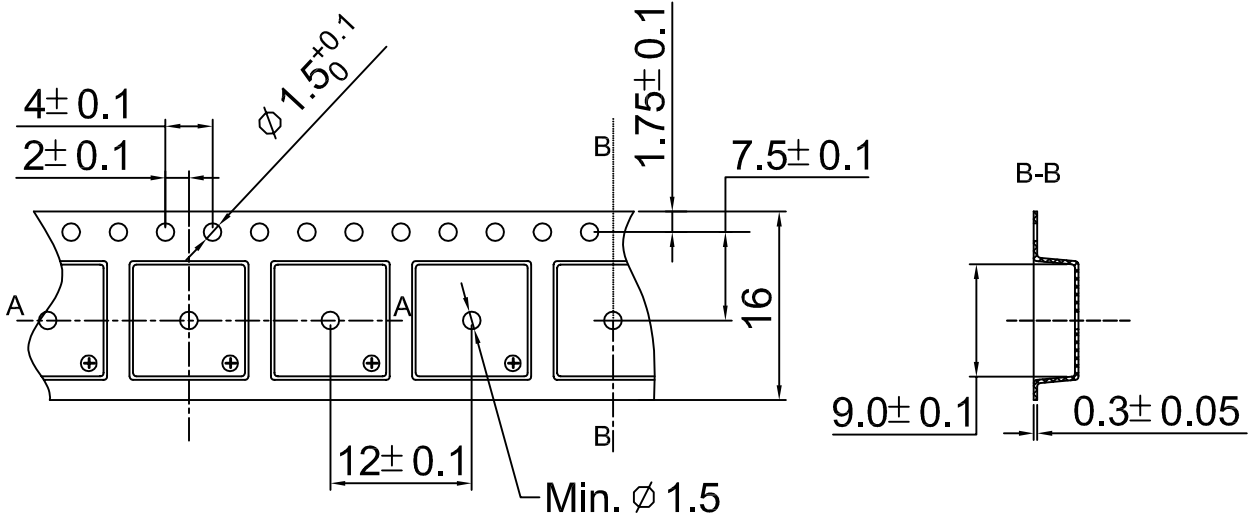
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6. Tape on Reel Packing

6.1 packing drawing

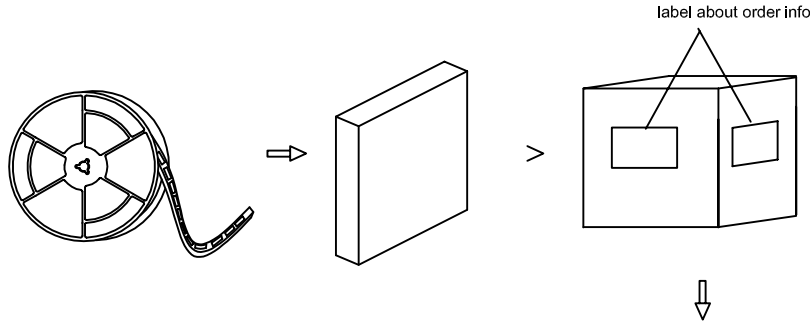
Dimensions of carrier tape



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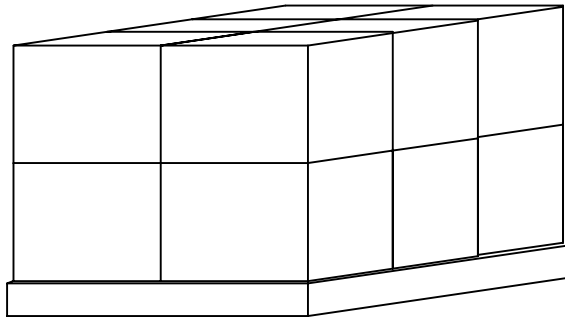
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6.2 packing quantity

- 6.21 1000pcs/reel
- 6.22 5reel/carton
- 6.23 5000 pcs/carton in total
- 6.24 carton size 38x28x37cm
- 6.25 12carton/tray
- 6.26 tray size 85x77x74cm



7. Notice

7.1 The products mustn't be washed

7.2 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.

7.3 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.

7.4 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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