



SPECIFICATION
FOR ELECTRO-MAGNET TRANSDUCER

TOTAL PAGE	8	www.be-star.com	RoHS
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Customer		Model Name	SMT8585-3.6H03-07 LF
Customer P/N		Product No.	050232
Date	10 Oct. 09	Issue No.	BS/TET01.615A
Page	01 of 08	Issue Date	09/10/10

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
魏奉玲	徐波	陶红仲	

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SMT8585-3.6H03-07 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

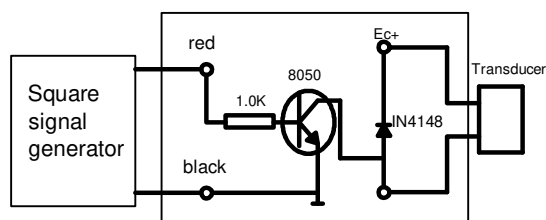
No.	Item	Specifications
1	Rated Voltage	3.6 Vo-p
2	Operating Voltage	2.5...4.5 Vo-p
3	a)Rated Current	max.90mA
4	a)Sound Output (at 10cm)	min.85dB
5	Resonance Frequency	2700Hz
6	Coil Resistance	15 ± 3ohm
7	Operating Temp.	-30...+70 °C
8	Storage Temp.	-40...+85 °C
9	Weight	0.42g
10	Housing material	LCP

a) value applying rated voltage (2700Hz,3.6Vo-p,1/2 duty,square wave)

1.3 Test method:

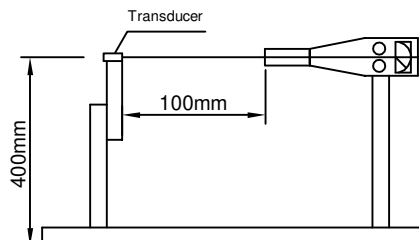
1.3.1.Recommended Circuit

the following are examples of externally driven circuits.



1.3.2.Standard test Fixture

No reaction in space with in 400mm in all direction



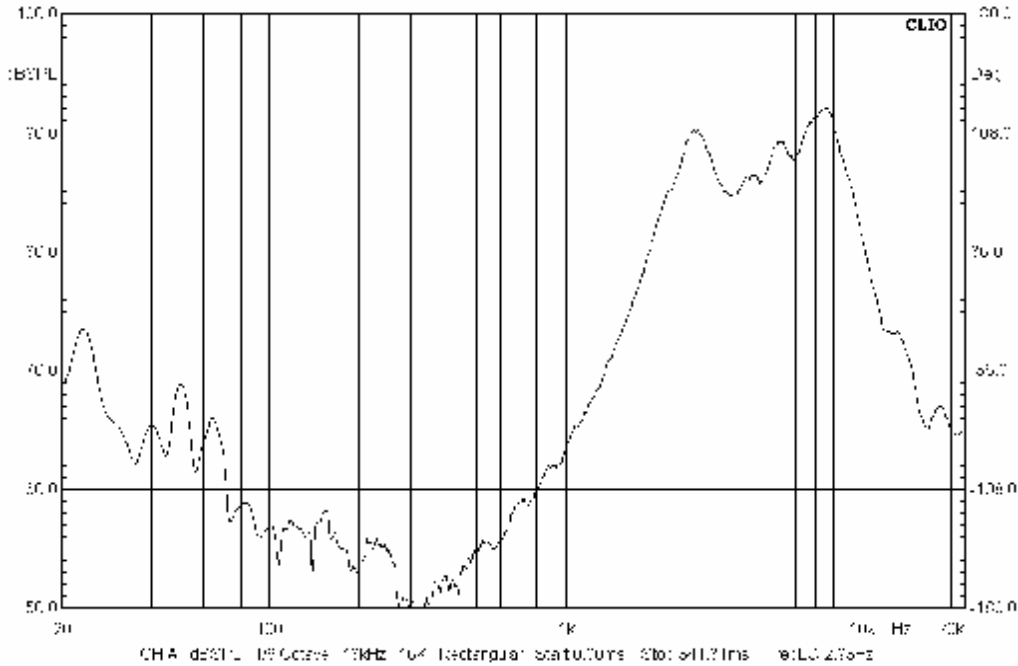
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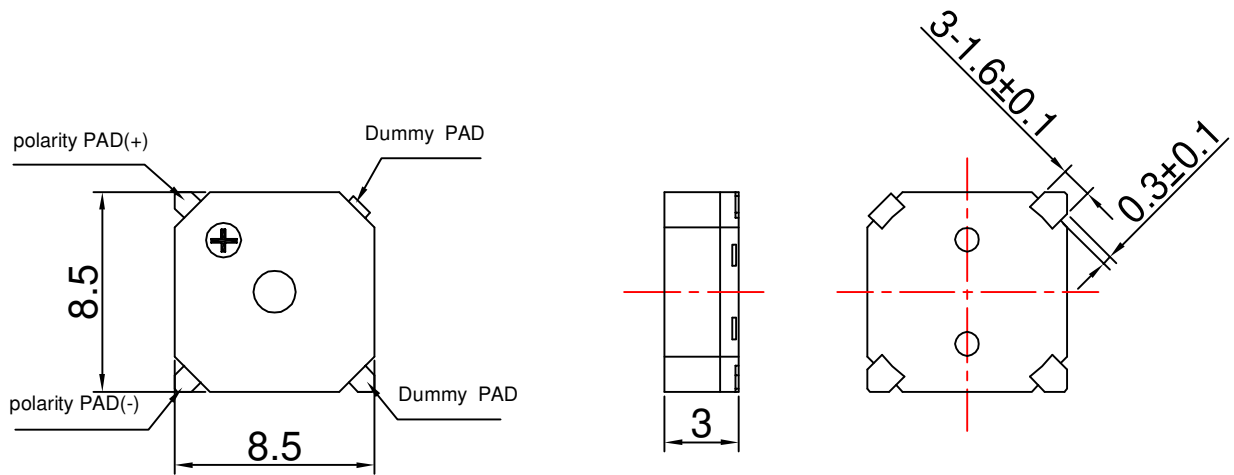
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1.4 Frequency Response (Square wave, 3.6V_{o-p} 10cm)

MLS-Frequency Response



2. Dimension



Tolerance: ± 0.3

Unit: mm

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Transducer

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3. Reliability Test

3.1 High temp. storage life test

Temperature +85 °C
Duration 96hrs

3.2 Low temp. storage life test

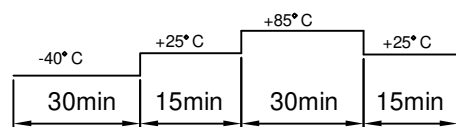
Temperature -40 °C
Duration 96hrs

3.3 Life test in normal temperature

Power supply Rated voltage
Duration 96hrs

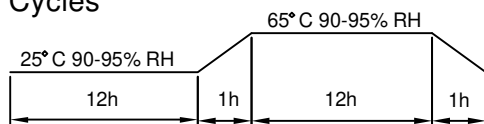
3.4 Temperature shock test

Cycles 14



3.5 Humidity cycle test

Cycles 10



3.6 High temp. life test

Temperature +85°C
Duration 96hrs

3.7 Low temp. life test

Temperature -40°C
Duration 96hrs

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

3.8 Vibration Test

Vibration Frequency 10~200~10Hz
Time 15min
Acceleration 5g
Direction x.y & z 2h (total 6hrs)

3.9 Drop test

Height 150cm(drop to concrete floor)
Direction one time in each 6 planes(total of 6 times)

3.10 Solderability

Temperature of soldering pot 255±5°C
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 83dB 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 to a minimum to prevent them from electrical failures and mechanical damages of the devices

Soldering(Reflow)

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

(2)The SMD Sound Transducers are designed for "Reflow Soldering" under the recommended solder profile

(3)SMD Sound Transducers which during the reflow soldering process are exposed to too high soldering temperatures and/or too large temperature gradient such as rapid heating or cooling may lead to electrical failures and mechanical damages of the devices.

Following soldering conditions are recommended; Refer to Fig.1

Temperature profile for a lead-free reflow process

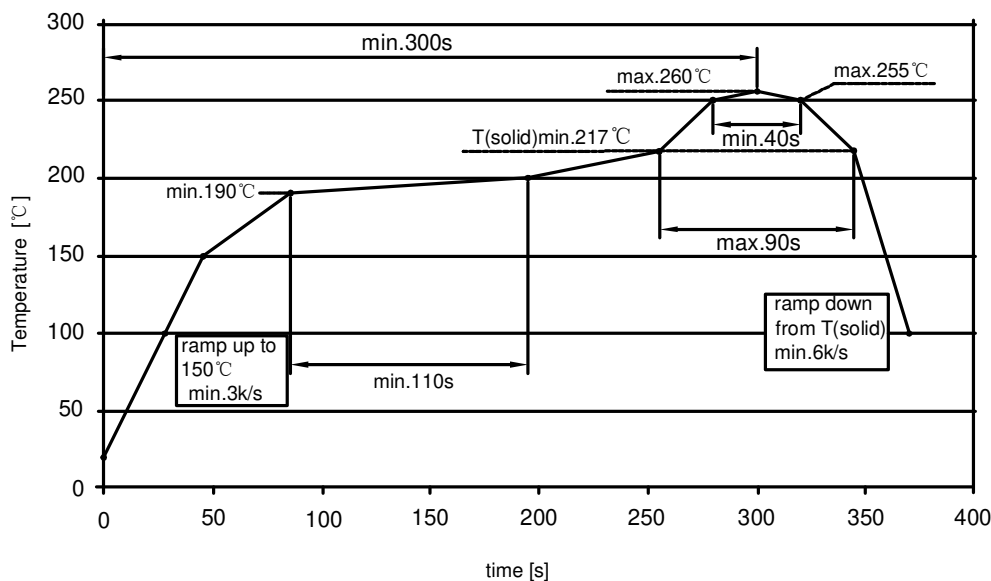


Fig. 1 Recommended soldering Temperature-Time profile (Reflow soldering)

Notice: All specification must be satisfied in this condition except SPL. SPL shall be 85dB or more.

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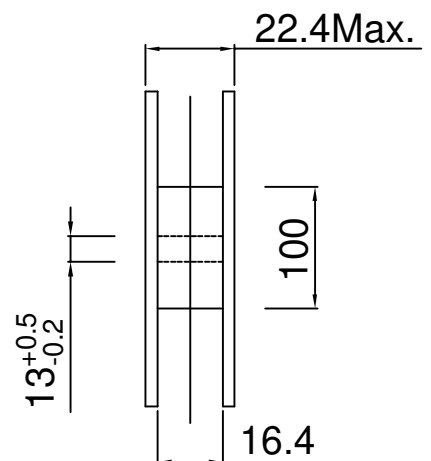
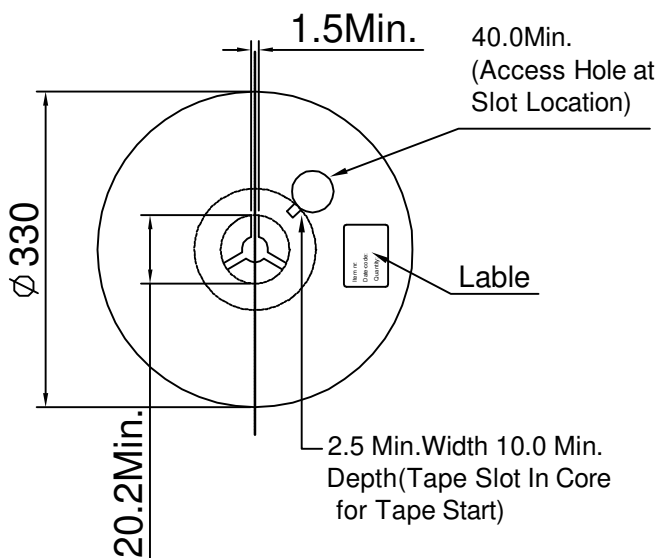
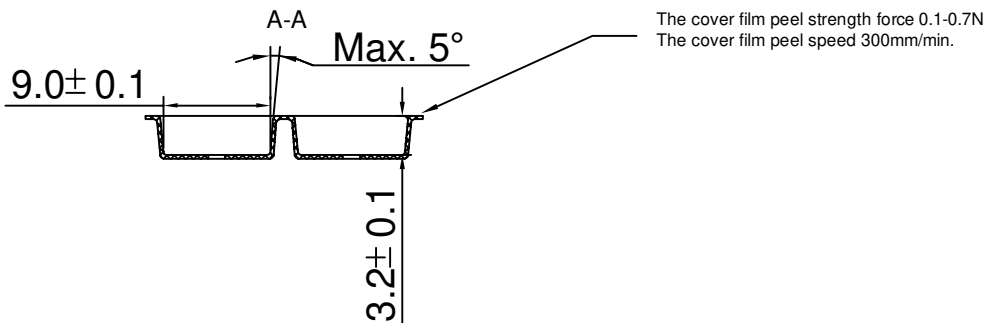
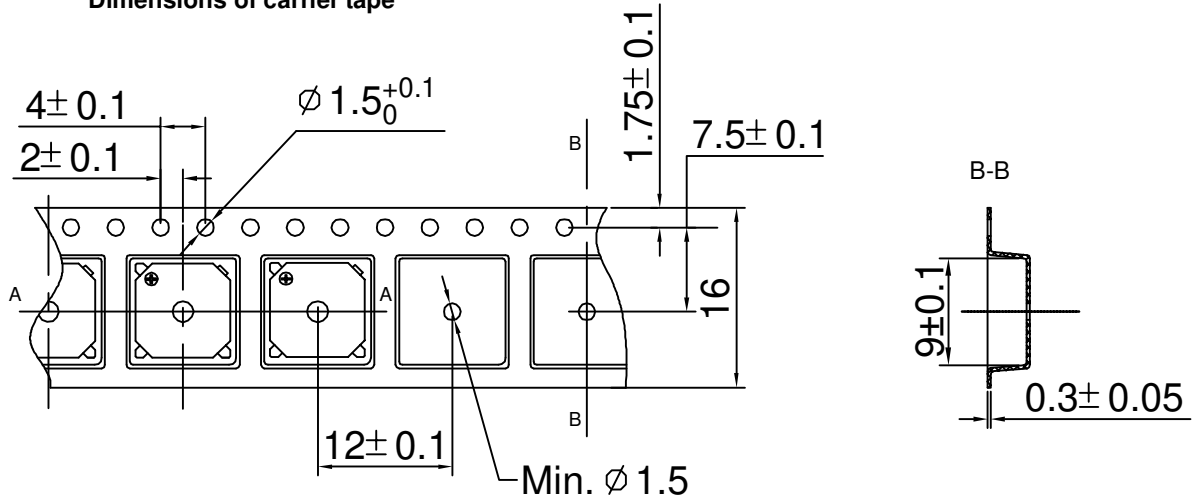
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5. Tape on Reel Packing

5.1 packing drawing

Dimensions of carrier tape

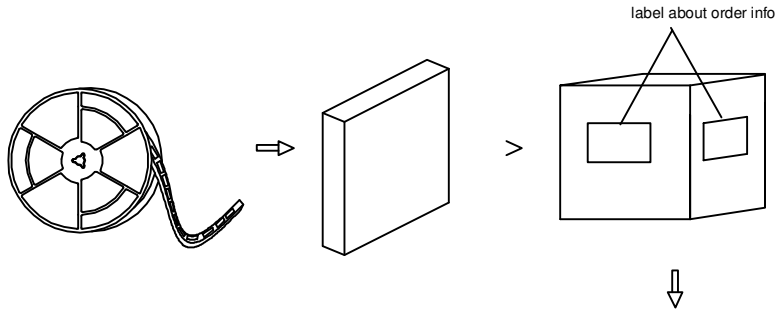


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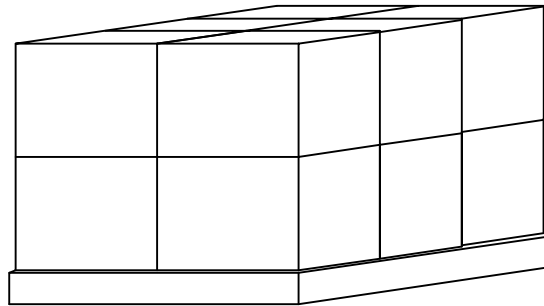
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5.2 packing quantity



- 5.2.1 1000pcs/reel
- 5.2.2 5reels/carton
- 5.2.3 5000 pcs/carton in total
- 5.2.4 carton size 38x28x37cm
- 5.2.5 12cartons/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 delivery under the conditions of a sealed and an unopened package. Please use the products within six months after delivery.

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

version No.	Change Items		Date	Drawn	Approved
	Before	After			
A			09/10/10	魏奉玲	陶红仲

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