

# SPECIFICATION FOR ELECTRO-MAGNET TRANSDUCER

Customer	
Customer P/N	
BeStar Model Name	BMT1201H8.5F-04 LF
Product No.	010217
Issue No.	BS/TET01.442A
Issue Date	07.3.25

## Approval:

- 1.Characteristics
- 2.Dimension
- 3.Reliability Test
- 4.Packing
- 5.Notice
- 6.History change record

Drawn by	Checked by	Approved by	Customer approved
韩学慧	朱成兴	程久生	

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)



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# BMT1201H8.5F-04 LF

## 1. Characteristics

### 1.1 Features

1. Dimension:  $\varnothing 12 \times 8.5$
2. High S.P.L.; and clear sound
3. RoHS compliant
4. Minimum quantity (one carton): 3000 pcs.



### 1.2 Electrical and Mechanical Characteristics

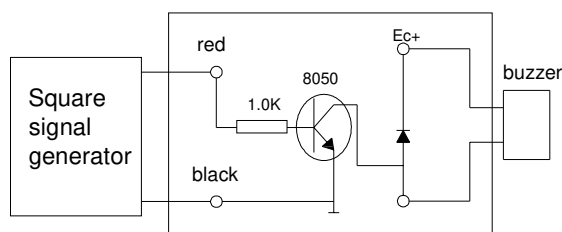
No.	Item	Specifications
1.	Rated voltage	1.5V
2.	Operating voltage range	1V to 2V
3.	Rated frequency	2743Hz
4.	a) Rated current	Max.60mA(typ51)
5.	Coil resistance	6.5ohm $\pm$ 2ohm
6.	a) Sound pressure level	min.85dB at 10cm(typ90)
7.	Operating temperature	-20...+60°C
8.	Storage temperature	-30...+70°C
9.	Weight	1.6g

a) Value applying rated voltage(2743Hz,50%duty,square wave 1.5V)

### 1.3 Test method:

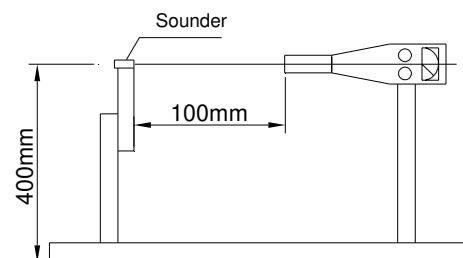
#### 1.31.Recommended Circuit

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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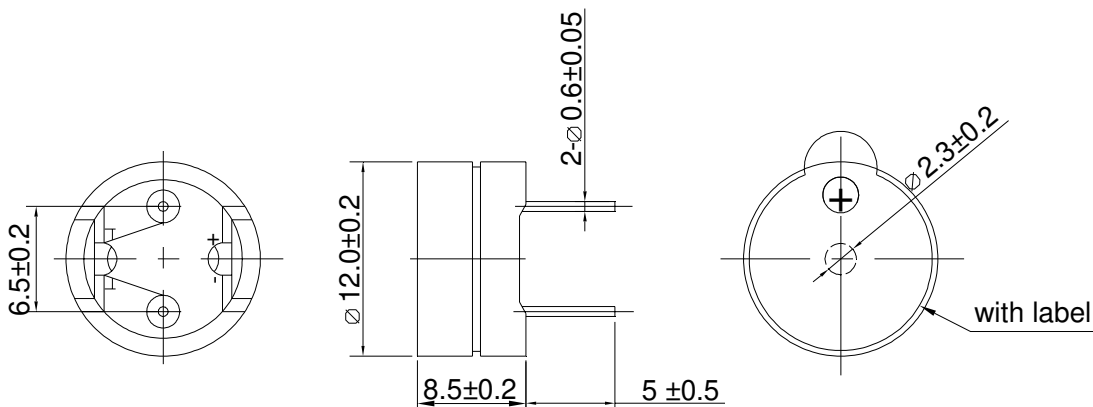
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				Drawn by:	韩学慧		
A	07.3.25	韩学慧		Checked by:	朱成兴	Transducer	
Rev.	Date	Drawn	Note	Approved by:	程久生		
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## 2. Dimension

Tolerance:  $\pm 0.3$

Unit:mm



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## 3. Reliability test

### 3.1 High temperature test

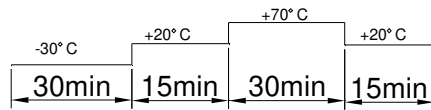
Temperature +70° C  
Duration 96hrs

### 3.2 Low temperature test

Temperature -30° C  
Duration 96hrs

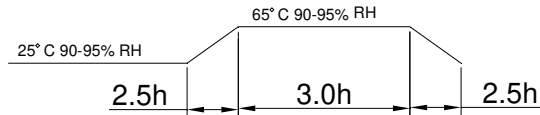
### 3.3 Temperature cycle test

Cycles 5



### 3.4 Humidity cycle test

Cycles 10



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

### 3.5 Load test

Power supply rated voltage  
Duration 1000hrs

### 3.6 Vibration Test

Vibration Frequency 10~55Hz  
Amplitude 1.5mm  
Duration x,y&z directions 30min

### 3.7 Drop test

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

### 3.8 Solderability test

Temperature 245° C  
Duration 3sec

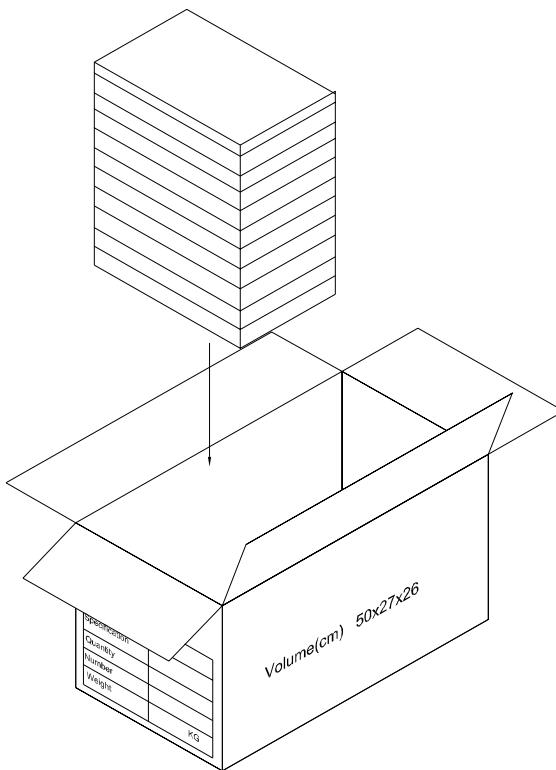
Notice: specification must be satisfied in this condition ,except S.P.L( S.P.L shall be 80dB more).

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## 4. Packing



- 1) 100pcs/tray
- 2) 30trays/carton
- 3) 3000 pcs/carton in total
- 4) carton size 50x27x26cm

## 5. 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.

(3) Please do not drop the products to avoid cracking of ceramic element.

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