

## SPECIFICATION FOR ELECTRO-MAGNET TRANSDUCER

Customer	
Customer P/N	
BeStar Model Name	BMT1205H8.5F LF
Product No.	010207
Issue No.	BS/TET01.085B
Issue Date	09/02/16

### Approval:

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

Drawn by	Checked by	Approved by	Customer approved

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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# BMT1205H8.5F LF

## 1. Characteristics

### 1.1 Features

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



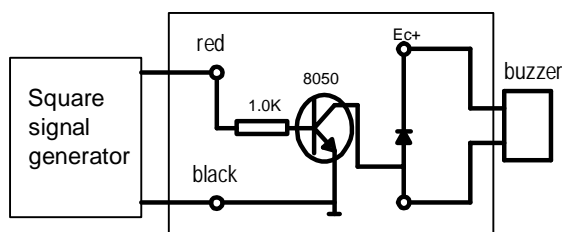
### 1.2 Electrical and Mechanical Characteristics

No.	Item	Specifications
1.	Rated voltage	5Vo-p
2.	Operating voltage range	1-5Vo-p
3.	Rated frequency	2048Hz
4.	a) Rated current	Max.40mA
5.	Coil resistance	50ohm $\pm$ 7.5ohm
6.	b) Coil impedance	140ohm
7.	a) Sound pressure level	min.85dB at 10cm
8.	Operating temperature	-25...+70°C
9.	Storage temperature	-30...+85°C
10.	Weight	2g
a) Value applying rated voltage(2048Hz,50%duty,square wave 5Vo-p)		
b) Value applying at rated voltage (2048Hz,sine wave measuring current 60 $\mu$ A)		

### 1.3 Test method:

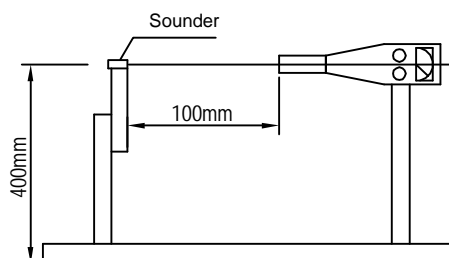
#### 1.31.Recommended Circuit

the following are examples of externally driven circuits.



#### 1.32.Standard test Fixture

No reaction in space with in 400mm in all direction

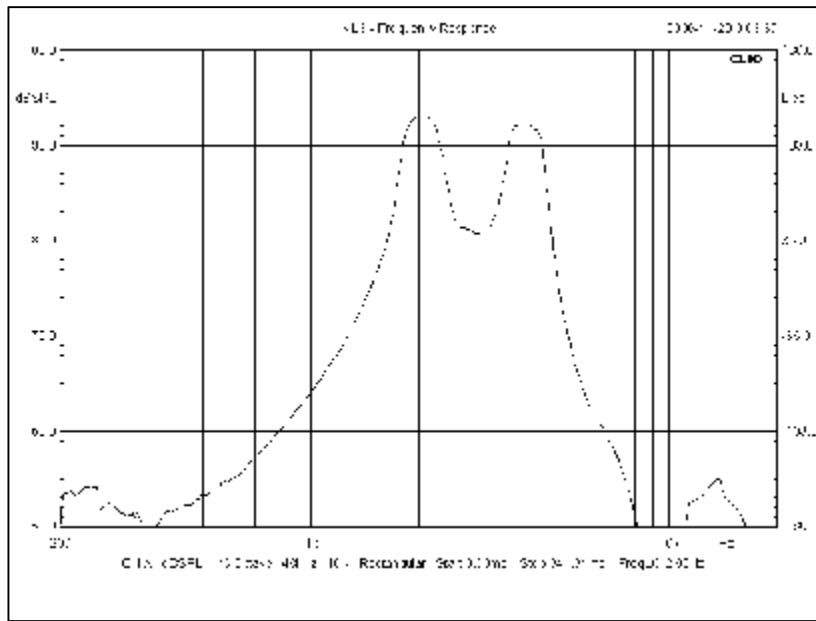


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B	09/02/16	魏奉玲	ROHS	Drawn by:	魏奉玲		
A	02/08/08	姜丽敏		Checked by:	徐波	Transducer	
Rev.	Date	Drawn	Note	Approved by:	王文邦		
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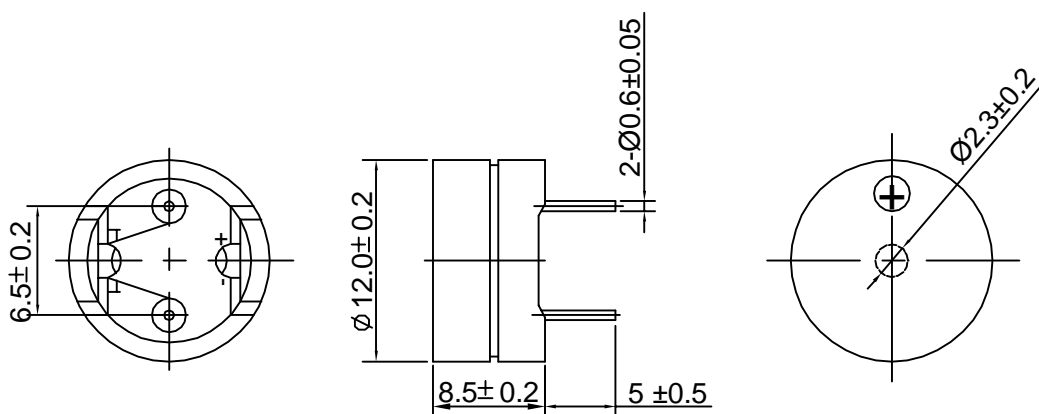
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## 1.4 Frequency Response(Square wave 5Vo-p 10cm)



## 2. Dimension

Tolerance:  $\pm 0.3$       Unit:mm



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## 3. Reliability test

### 3.1 High temperature test

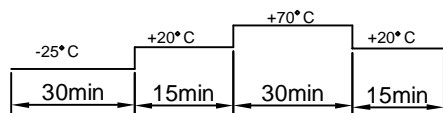
Temperature +70 °C  
 Duration 96hrs

### 3.2 Low temperature test

Temperature -25 °C  
 Duration 96hrs

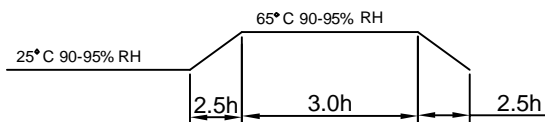
### 3.3 Temperature cycle test

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 255±5 °C  
 Duration 3±0.5sec

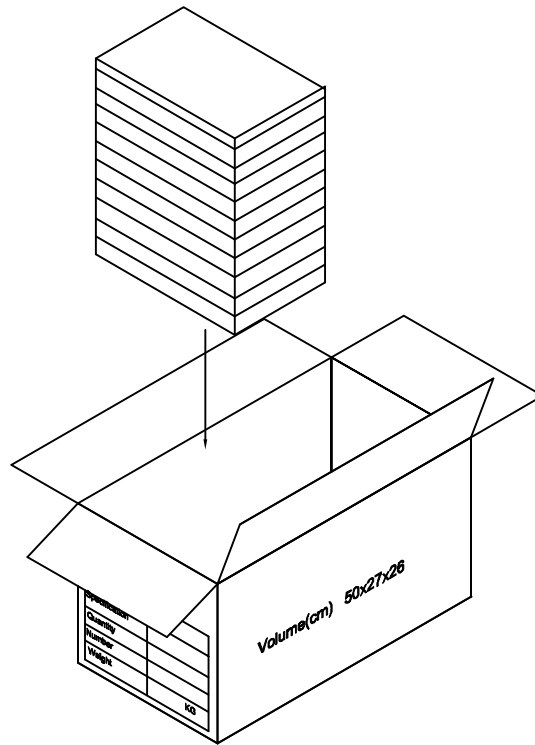
Notice: specification must be satisfied in this condition ,except S.P.L( S.P.L shall be 80dB more).

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## 4. Packing



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

## 5. Notice

5.1 The products mustn't be washed

### 5.2 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.

### 5.3 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.

### 5.4 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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# BMT1205H8.5F LF

## 6. History change record

version No.	Change Items		Date	Drawn	Approved
	Before	After			
A			02/08/08	姜丽敏	夏炎传
B		ROHS	09/02/16	魏奉玲	王文邦

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