

SPECIFICATION FOR PIEZO ELECTRIC SOUNDER

Customer	
Customer P/N	
BeStar Model Name	F-B-P3009EPB-01 LF
Product No.	032202
Issue No.	BS/TEP01.115B
Issue Date	06/06/05

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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F-B-P3009EPB-01 LF

1. Characteristic:

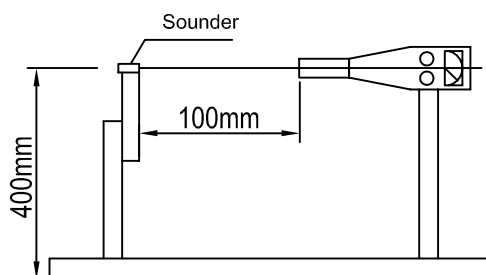


1.1 Electrical and Mechanical Characteristics

Item	Specification
Rated Voltage(Square Wave)	9Vp-p
Operating Voltage	1-30Vp-p
*Rated Current	max.5mA
*Sound Output at 10cm ,2500Hz	min.90dB
Resonant Frequency	2500Hz
Capacitance at 120Hz	20000± 30% pF
Operating Temperature	-40...+85° C
Storage Temperature	-40...+85° C
Weight	5g
*Value applying at rated voltage.	

1.2 Test method:

No reaction in space with in 400mm in all direction

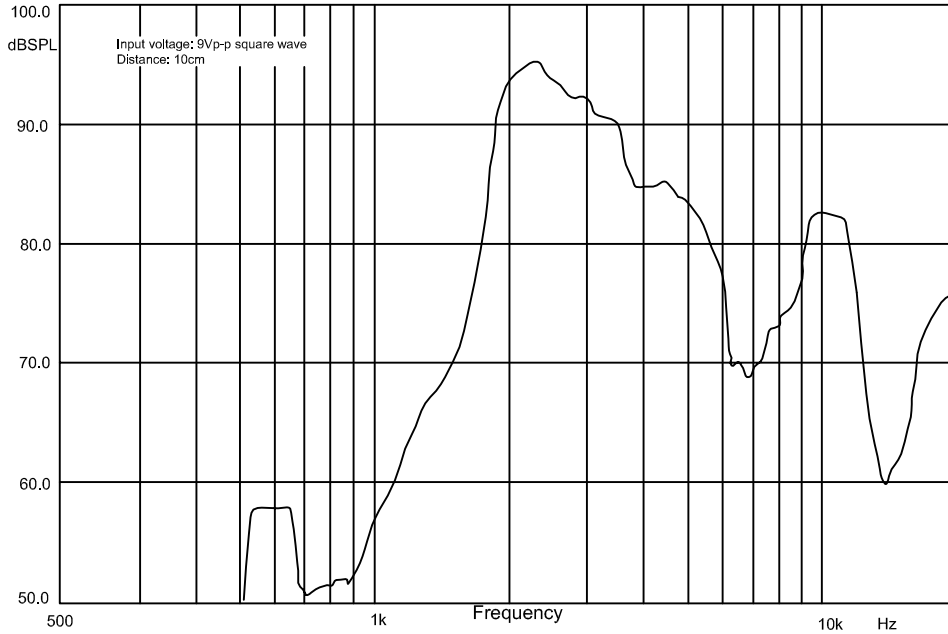


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B	06/06/05	杨红焯		Checked by:	高正	Piezo Sounder	
REV.	Date	Drawn	Note	Approved by:	程久生		
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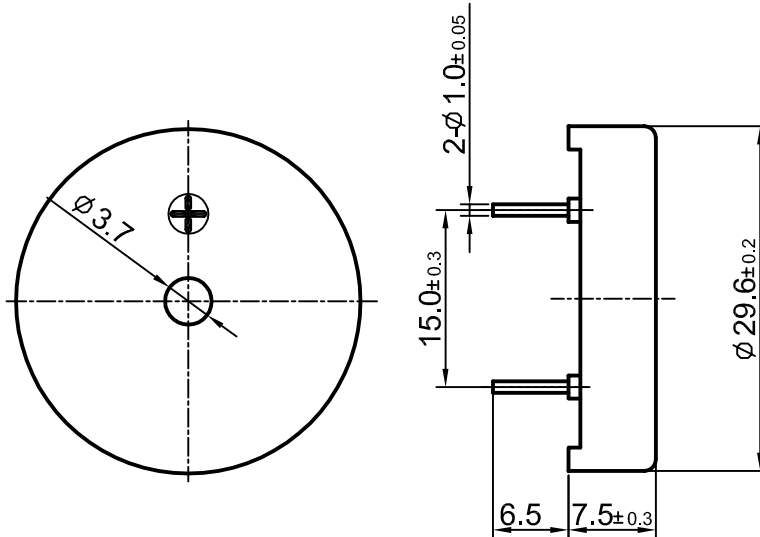
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1.3 Frequency Response Curve (Square wave 9Vp-p 10cm)



2.Dimension

tolerance:± 0.3 unit:mm



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3. Reliability Test

3.1 High temperature test

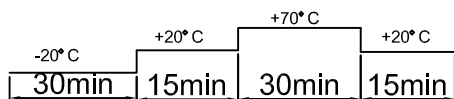
Temperature +85 ° C
Duration 96hrs

3.2 Low temperature test

Temperature -40 ° C
Duration 96hrs

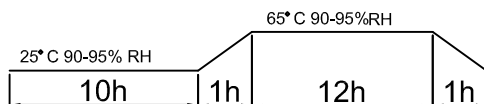
3.3 Temperature cycle test

Cycles 5



3.4 Humidity cycle test

Cycles 5



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

3.5 Life test in normal temperature

Power supply Rated voltage
Duration 1000hrs

3.6 Vibration Test

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

3.7 Solderability

Temperature of soldering pot 250° C± 5
Duration 3± 0.5sec

3.8 Drop test

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

Notice: All specifications must be satisfied in this condition.

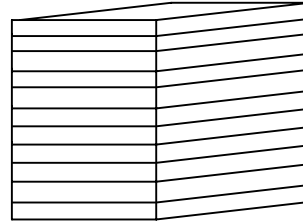
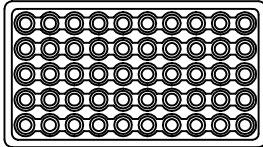
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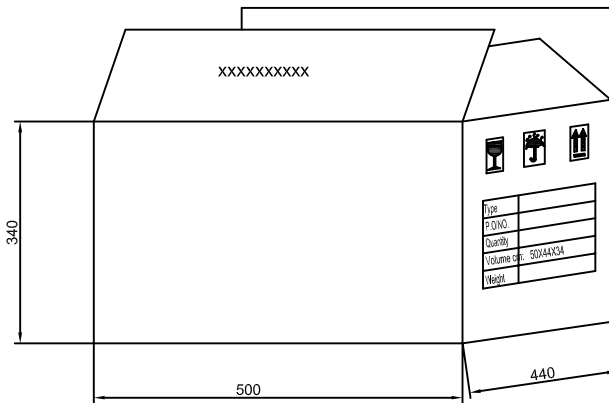
4.Packing

4.1 packing drawing



4.2 packing quantity

- 1)50pcs/tray
- 2)40tray/carton
- 3)2000 pcs/carton in total
- 4)carton size 50x44x34cm



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 Expre 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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6. History change record

version No.	Change Items		Date	Drawn	Approved
	Before	After			
A			06/02/08	杨红焯	郭敏
B	the topside of the part have no "+"sign	the topside of the part have "+"sign	06/06/05	杨红焯	程久生

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