

**OBO Pro.2****SPECIFICATIONS****MODEL NO.**  
OBO-13008F-06**PART NAME**  
DYNAMIC SPEAKER**SHEET**  
1 OF 7**ALTERNATION HISTORY**

| Marking | Date        | ECN NO.   | REV. | Description            | Page | PREPARE BY | APPROVE BY |
|---------|-------------|-----------|------|------------------------|------|------------|------------|
| ※1      | JUL,27,2006 | DG0606014 | B    | 1. Change to RoHS Type | 7    | 蔡愛國        | K.C.Wang   |
|         |             |           |      |                        |      |            |            |



| REV. | DATE        | PREPARED BY | CHECKED BY | APPROVED BY |
|------|-------------|-------------|------------|-------------|
| B    | JUL,27,2006 | 蔡愛國         | K.C.Wang   | K.C.Wang    |

**OBO.Pro.2.****SPECIFICATIONS****MODEL NO.**  
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2 OF 7**MODEL NO : OBO-13008F-06**

OBO PRO.2 INC.

2006 JUL 31.

Features:Conformity RoHS Directive(2002/95/EC) Requests. ※1

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**1. General Specifications**

| Items                               | Spec.   |
|-------------------------------------|---|
| Magnet                              | Materials NdFeB      Size: $\phi 6.8 \times 1.2$ mm.  |
| Weight                              | Approx 1.0 Grams                                      |
| Nominal Impedance                   | 8 Ohm $\pm$ 15% At 2100 Hz/1.0V                       |
| Power Rating                        | Normal 0.3W.      Maximum 0.5W.                       |
| Lowest Resonant Frequency           | 1050 $\pm$ 210 Hz.                                    |
| Output Sound Pressure Level (S.P.L) | 88 $\pm$ 3dB /0.3Watt 0.1Meter                        |
|                                     | Average at 1000,1200,1500,2000Hz                      |
| Frequency Range                     | 700 ~7000 Hz.      Average SPL-10 dB.                 |
| Distortion                          | 10% Maximum At 1200 Hz.      0.3W.                    |
| Abnormal Sound Test                 | Must be Normal Tested by 1.56Volts. Sine Wave.        |
| Polarity                            | Diaphragm shall move Forward when Apply a Positive DC |
|                                     | Current to the "+" or "Marked" Terminal.              |
| Operating Temperature               | -25°C to +50°C  |
| Storage Temperature                 | -25°C to +55°C  |

**2. Environmental Test**

|                        |   |   |   |
|------------------------|---|---|---|
| Humidity Test          | High Temperature  | : | +40°C $\pm$ 3°C   |
|                        | Relative Humidity   | : | 90% ~ 95%   |
|                        | Duration  | : | 96 Hours  |
|                        | Duration of recovery  | : | 6 Hours   |
| Temperature Cycle Test | Temperature   | : | +55°C $\rightarrow$ +25°C $\rightarrow$ -25°C $\rightarrow$ +25°C |
|                        | Duration  | : | 1Hour      1Hour      1Hour      1Hour                            |
|                        | Cycle   | : | 3 Cycles  |
| Vibration Test         | Vibration Direction   | : | 3 axes  |
|                        | Mounting  | : | Unit Shall Be Rigidly Restrained On The Table                     |
|                        | Frequency   | : | 1,000 Cycle/Minute  |
|                        | Amplitude   | : | 1.5m/m  |
|                        | Endurance   | : | 1 Hour in Each Plane  |
|                        | Duration of Transfer Time   | : | Less Than 5Minutes  |
| Load Test              | White Noise With Weighted Filter 1.56 Volts.(RMS) 100 Hrs:<br>20~20,000Hz Resonant Frequency. |   |   |
| Drop Test              | 70cm Free Falling On 1cm Wood Floor, With 10 times.   |   |   |

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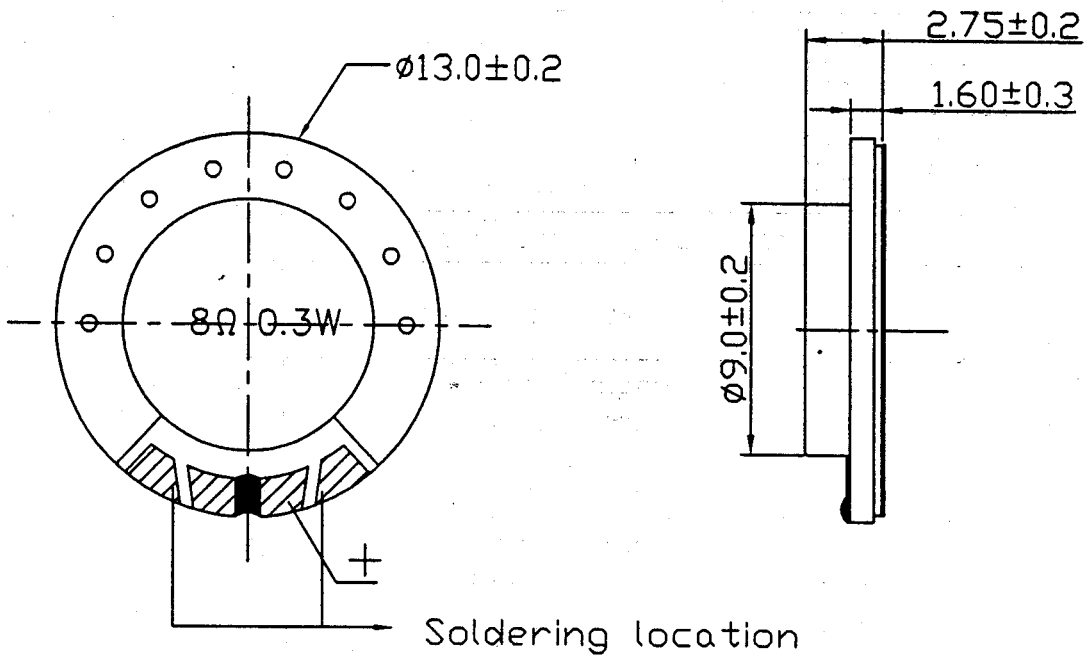
**SHEET**  
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**3. Mechanical Layout And Dimensions**

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3.1 Dimensions

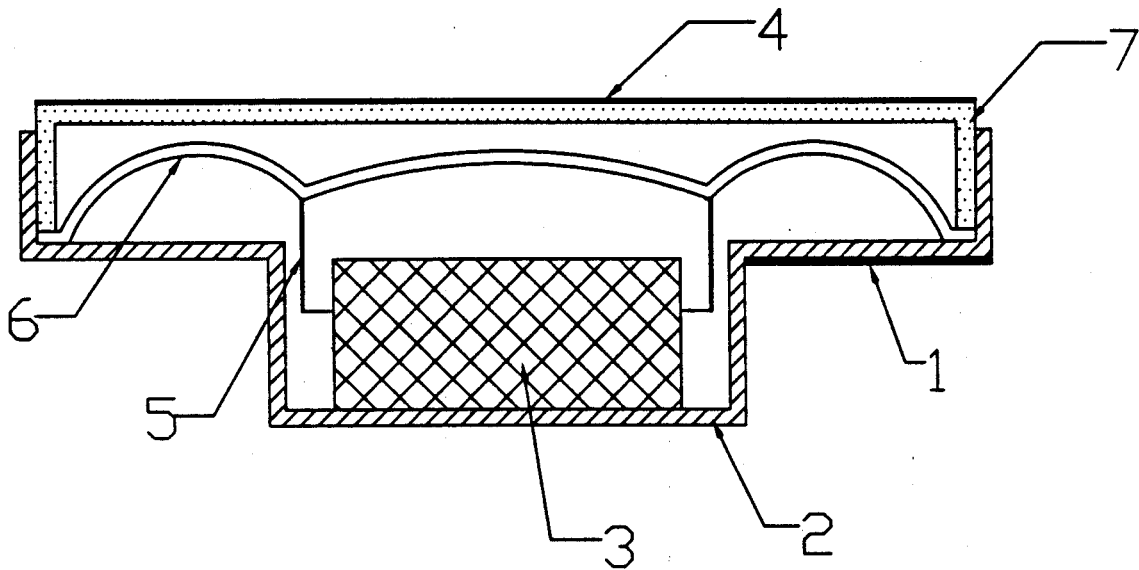
Unit:mm Tolerance:±0.3



※1 PCB Soldering Temperature 380° Max For 3 Seconds.

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## 3.2 Construction Diagram

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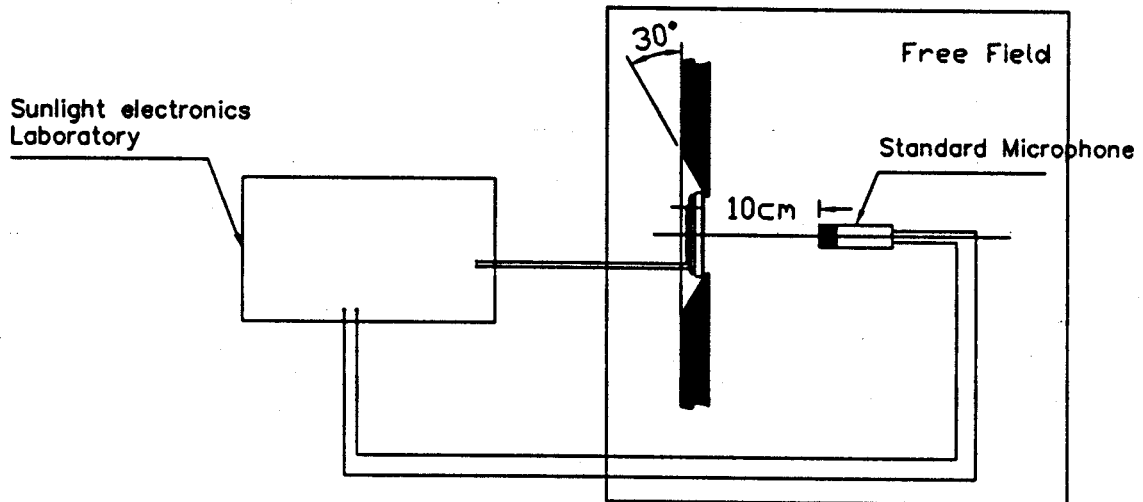
|    |            |                 |      |
|----|------------|-----------------|------|
| 7  | COVER      | STAINLESS STEEL | 1    |
| 6  | DIAPHRAGM  | MYLAR           | 1    |
| 5  | VOICE COIL | DIA 7.40 mm     | 1    |
| 4  | CLOTH      | CLOTH           | 1    |
| 3  | MAGNET     | NdFeB           | 1    |
| 2  | YOKE       | SPCC            | 1    |
| 1  | TERMINAL   | P.C.B           | 1    |
| NO | PART NAME  | MATERIAL        | Q'TY |

### 4. Test Method

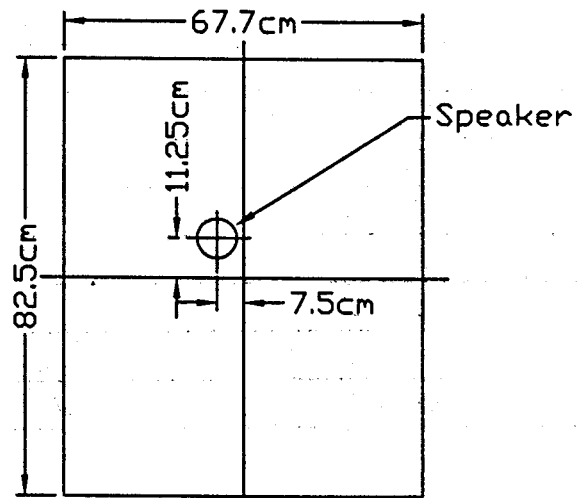
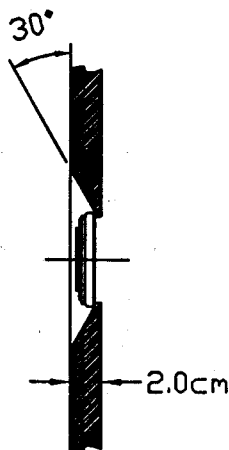
#### 4.1 Measurement Diagram

Electroacoustic  
Testing Adapter

Sunlight electronics  
Laboratory



#### 4.2 Standard Baffle



**OBO.Pro.2.**

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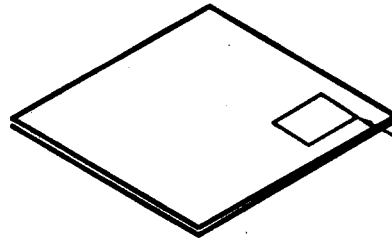
**PART NAME**  
DYNAMIC SPEAKER

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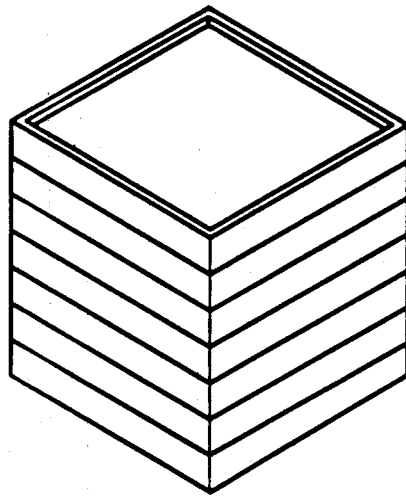
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※1 **5. Package**

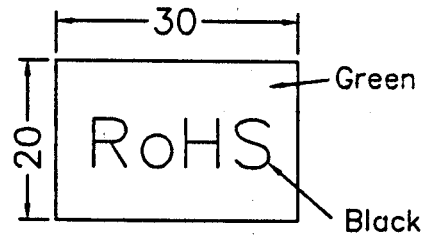
Unit:mm



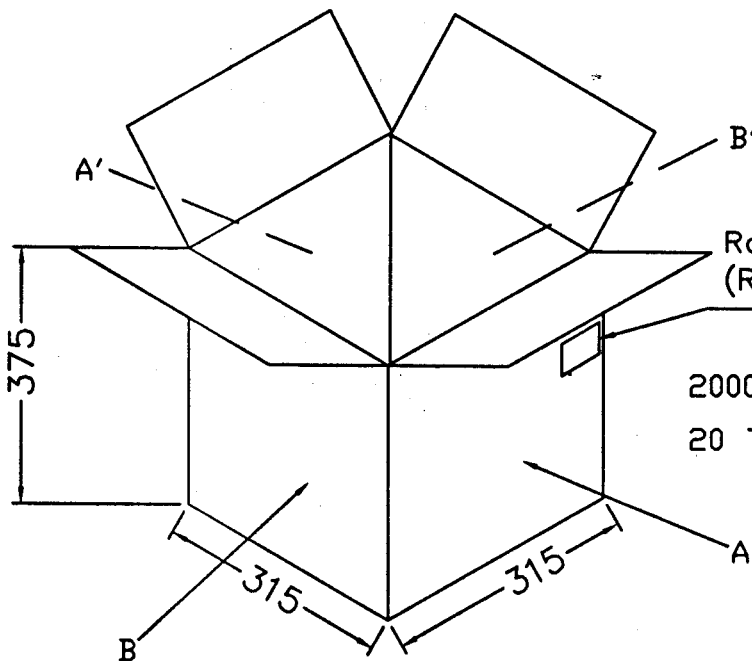
RoHS Tape  
(Right Down of Cover)



100pcs/TRAY



RoHS Tape  
(30\*20)



RoHS Tape  
(Right Top of Carton)

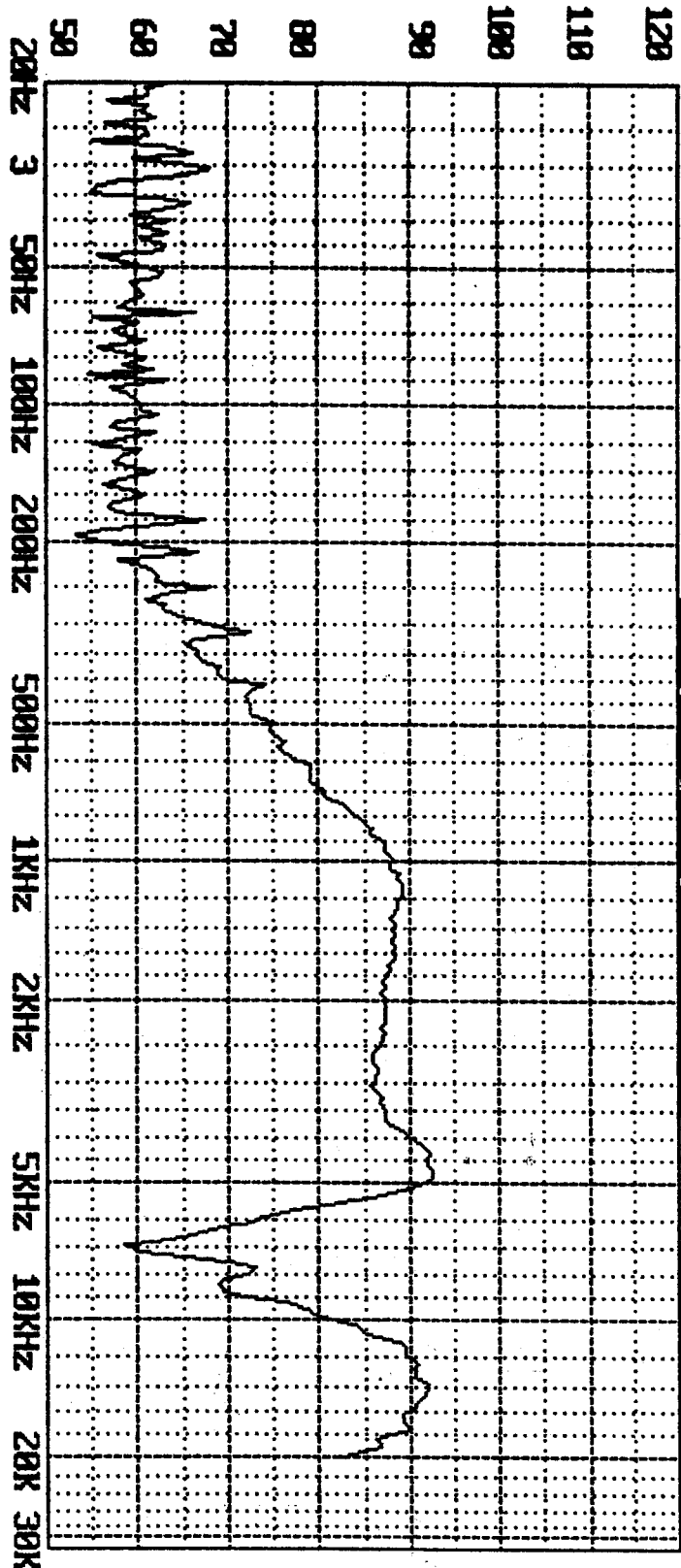
2000 pcs/Carton  
20 TRAY(315\*315\*375)

Firm: OBO      Model: OBO-1300BF-06      DATE: 07-26-2006      TIME: 16:15:08  
1000Hz Sens. = 88.2dB SPL Pass      F.R.: Pass      DCR: 8.319 Pass  
Average SPL: 88.2dB SPL Pass      (1000:1200:1500:2000Hz)      Sweep Speed: 1/24 Oct.

B 6.11

dB SPL

Frequency Response curve



Voltage applied for **F.R.** = 1.560V      **Start F.** = 20Hz      **Stop F.** = 20000Hz  
Measuring Distance = 0.18M

Mfg.: OBO-1300BF-06

Measured using Sunlight 1600; Fax: 886-2-22230727