



**OBO.Pro.2****SPECIFICATIONS****MODEL NO.**  
OBO-50050G-01**PART NAME**  
DYNAMIC SPEAKER**SHEET**  
2 OF 7**MODEL NO : OBO-50050G-01**OBS  
2006 JUN 19  
文件

Features:Conformity RoHS Directive(2002/95/EC) Requests.(\*)

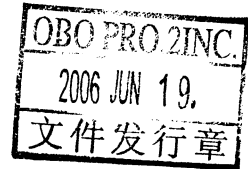
**1. General Specifications**

Items	Spec.
Magnet	Materials NdFeB Size: $\phi 12.5 \times 1.5$ mm.
Weight	Approx 10.5 Grams
Nominal Impedance	50 Ohm $\pm$ 15% At 600 Hz / 1.0V
Power Rating	Normal 0.2W. Maximum 0.5W.
Lowest Resonant Frequency	400 $\pm$ 150 Hz.
Output Sound Pressure Level (S.P.L)	81 $\pm$ 3dB /0.2W 0.5Meter.
	Average at 1000,1200,1500,2000Hz.
Frequency Range	250 ~10000 Hz. Average SPL-10 dB.
Distortion	5% Maximum At 1000 Hz. 0.2W.
Abnormal Sound Test	Must be Normal Tested by 3.1Volts. 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**

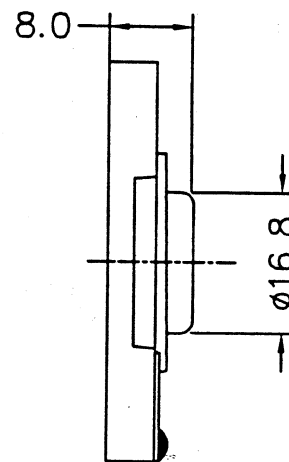
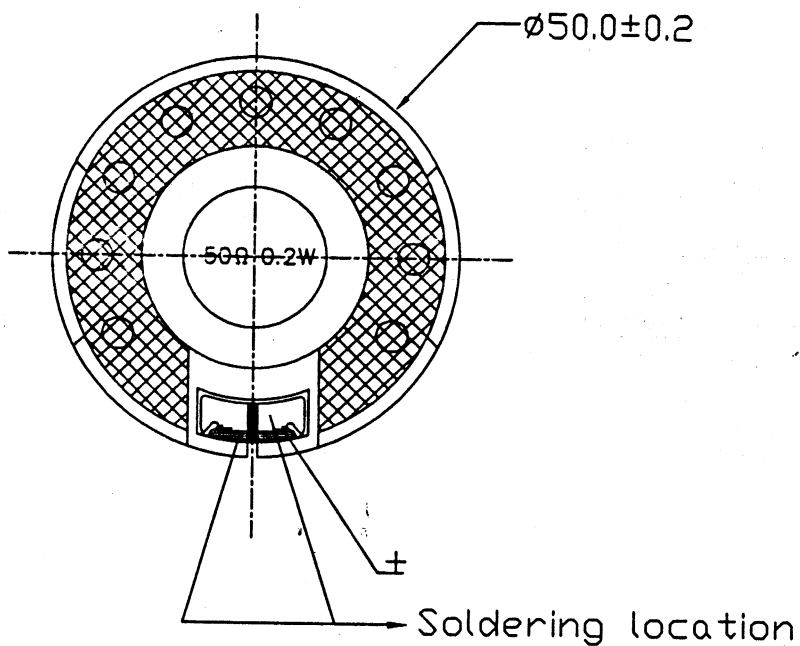
Humidity Test	High Temperature	:	+40°C $\pm$ 3°C
	Relative Humidity	:	90% ~ 95%
	Duration	:	96 Hours
	Duration of recovery	:	6 Hours
Temperature Cycle Test	Temperature	:	+55°C $\rightarrow$ +25°C $\rightarrow$ -25°C $\rightarrow$ +25°C
	Duration	:	1Hour 1Hour 1Hour 1Hour
	Cycle	:	3 Cycles
Vibration Test	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 3.1 Volts.(RMS) 100 Hrs. 20~20,000Hz Resonant Frequency.		
Drop Test	70cm Free Falling On Concrete Floor, with 10 times.		

**3. Mechanical Layout And Dimensions**



**3.1 Dimensions**

Unit:mm Tolerance:±0.3



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

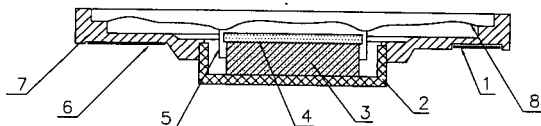
**OBO.Pro.2****SPECIFICATIONS**MODEL NO.  
OBO-50050G-01PART NAME  
DYNAMIC SPEAKERSHEET  
4 OF 7

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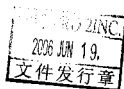
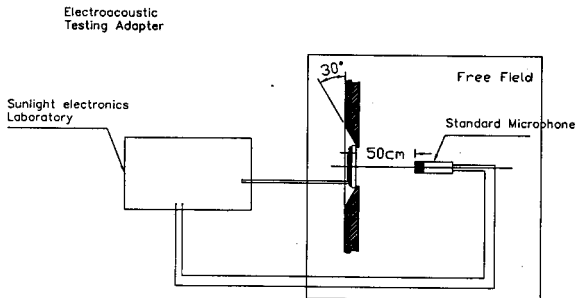
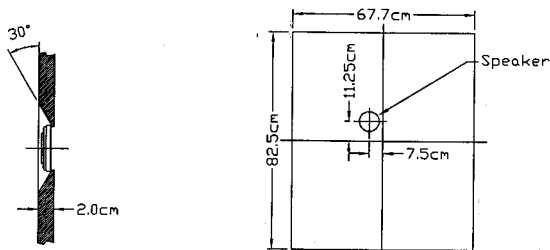
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## 3.2 Construction Diagram



8	DIAPHRAGM	MYLAR	1
7	PLASTICS CASE	ABS	1
6	CLOTH	CLOTH	1
5	VOICE COIL	DIA 13.3 mm	1
4	WASHER	SPCC	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****4.2 Standard Baffle**

# OBO Pro.2<sup>TM</sup>

## SPECIFICATIONS

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OBO-50050G-01

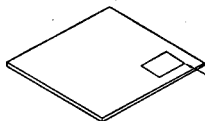
PART NAME  
DYNAMIC SPEAKER

SHEET  
6 OF 7

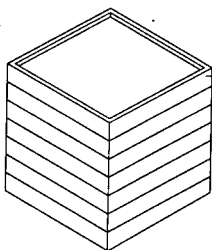
### ※1 5. Package

Unit:mm

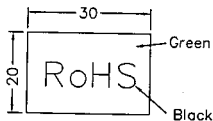
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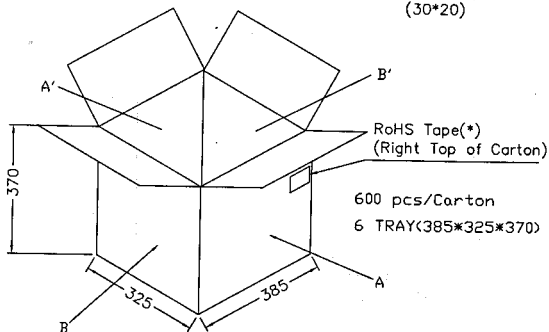
RoHS Tape(\*)  
(Right Down of Cover)



100pcs/TRAY



RoHS Tape  
(30\*20)

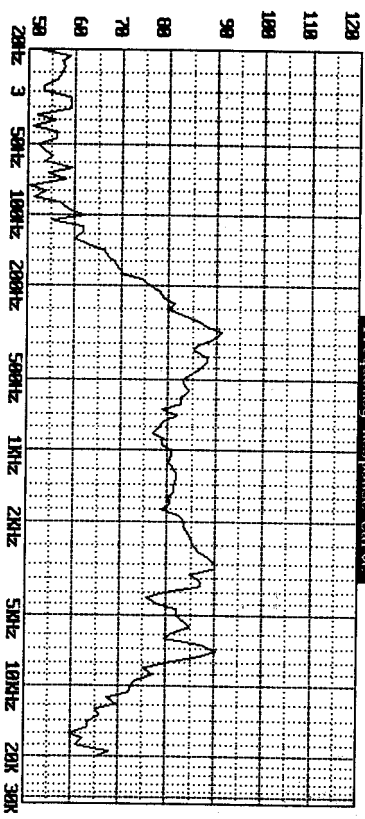


600 pcs/Carton  
6 TRAY(385\*325\*370)

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Firm: OBO-590506-01    Model: OBO-590506-01    DATE: 06-15-2006    TIME: 15:58:14  
 1000Hz Sens. = 80.6dBSPL Pass    F.R.: Pass    DCR: 51.62 Pass  
 Average SPL: 81.6dBSPL Pass    (1000:1200:1500:2000Hz)    Sweep Speed: 1/12 Oct.

dBSPL    Frequency Response curve    B 6.11



Voltage applied for **F.R.** = 3.100V    **Start F.** = 200Hz    **Stop F.** = 20000Hz  
 Measuring Distance = 0.50M

Mfg.: OBO-590506-01

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