



**MODEL NO : OBO-50004F-01**

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

**1. General Specifications**

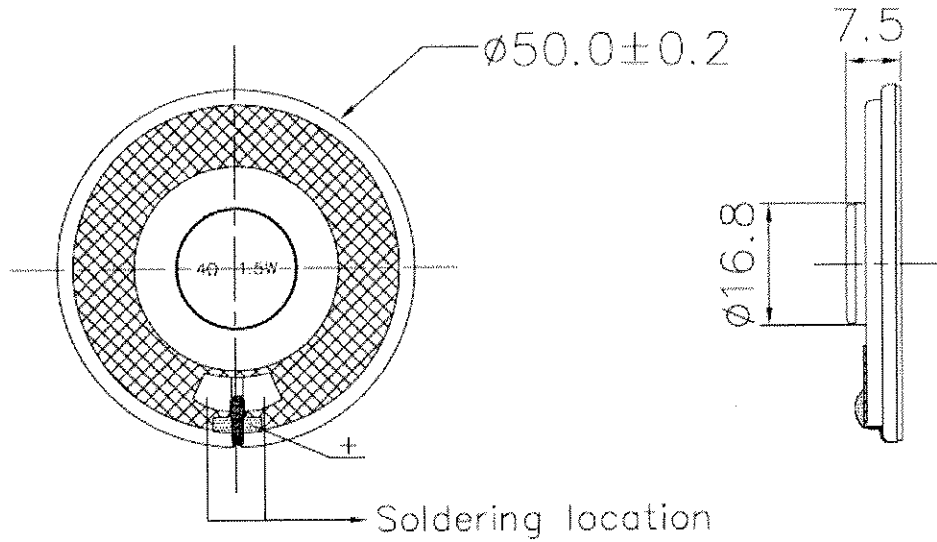
Items	Spec.
Magnet	Materials Rare Earth Size: $\Phi$ 12.5X1.5mm
Weight	Approx 13.2 Grams
Nominal Impedance	4 Ohm $\pm$ 15% At 1000 Hz /1.0V
Power Rating	Normal 1.5W. Maximum 2.0W.
Lowest Resonant Frequency	550 $\pm$ 100Hz.
Output Sound Pressure Level (S.P.L)	88 $\pm$ 3dB /1.0W/0.5Meter (Secundum IEC-268-5 Statute) Average at 1000,1200,1500,2000Hz.
Frequency Range	350 ~20,000 Hz. Average SPL -10dB.
Distortion	5% Maximum At 1000Hz/1.0W
Abnormal Sound Test	Must be Normal Tested by 2.45Volts. Sine Wave.
Polarity	Diaphragm shall move Forward when Apply a Positive DC Current to the "+" or "Marked" Terminal.
Operating Temperature	-25 $^{\circ}$ C to +50 $^{\circ}$ C
Storage Temperature	-25 $^{\circ}$ C to +55 $^{\circ}$ C

**2. Environmental Test**

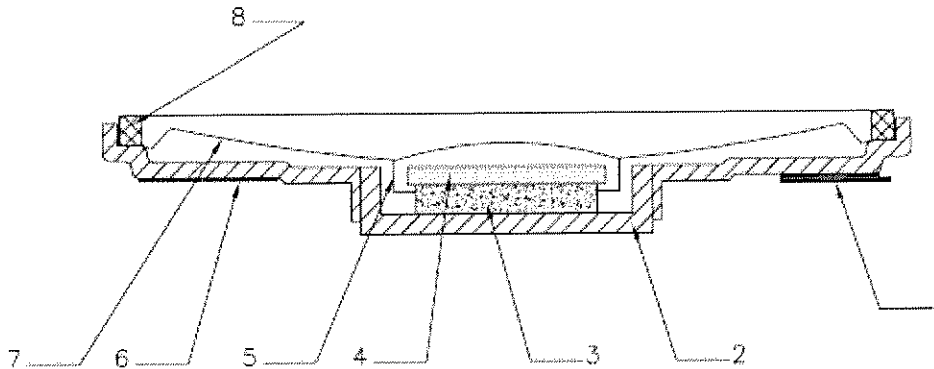
Humidity Test	Temperature:	+40 $^{\circ}$ C $\pm$ 3 $^{\circ}$ C
	Relative Humidity:	90% ~ 95%
	Duration:	96 Hours
	Duration of recovery:	6 Hours
Temperature Cycle Test	Temperature:	+55 $^{\circ}$ C $\rightarrow$ +25 $^{\circ}$ C $\rightarrow$ -20 $^{\circ}$ C $\rightarrow$ +25 $^{\circ}$ C
	Duration:	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 2.45 Volts.(RMS) 96 Hrs. 20~20,000Hz Resonant Frequency.	
Drop Test	75cm Free Falling On Concrete Floor, with 10 times.	

### 3. Mechanical Layout And Dimensions

#### 3.1 Dimensions



#### 3.2 Construction Diagram

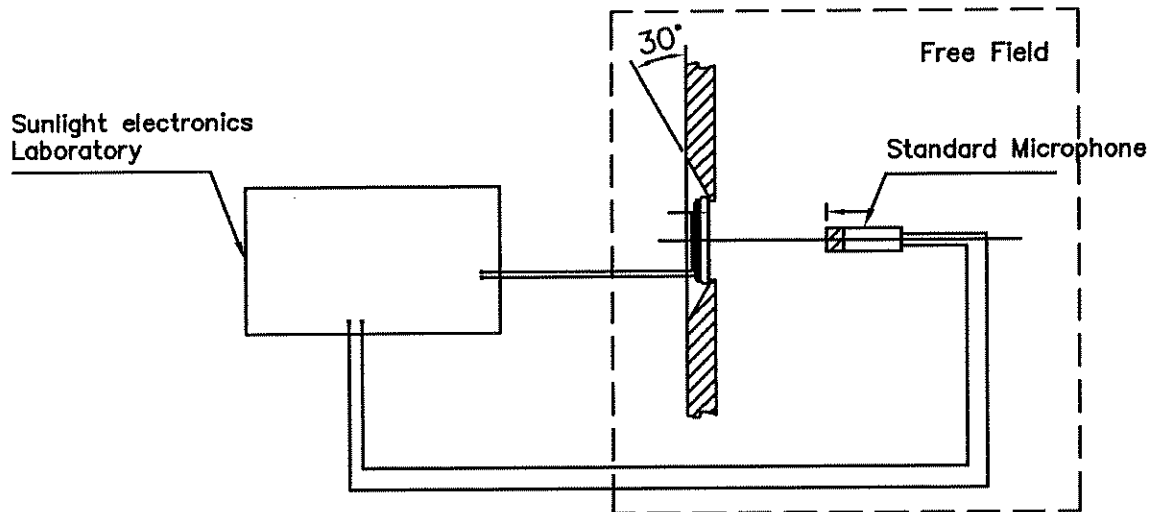


8	GASKET	PAPER	1
7	DIAPHRAGM	MYLAR	1
6	CLOTH	CLOTH	1
5	VOICE COIL	DIA 13.28mm	1
4	WASHER	SPCC	1
3	MAGNET	NdFeB	1
2	YOKE	SPCC	1
1	TERMINAL	P.C.B	1
NO	PART NAME	MATERIAL	Q'TY

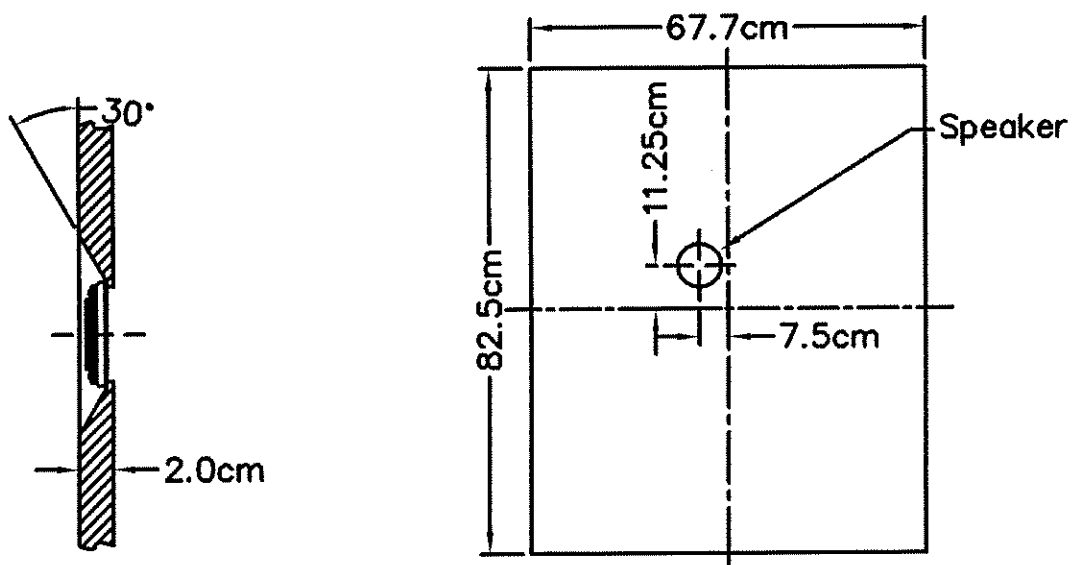
### 4. Test Method

#### 4.1 Measurement Diagram

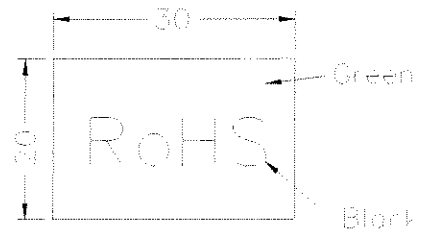
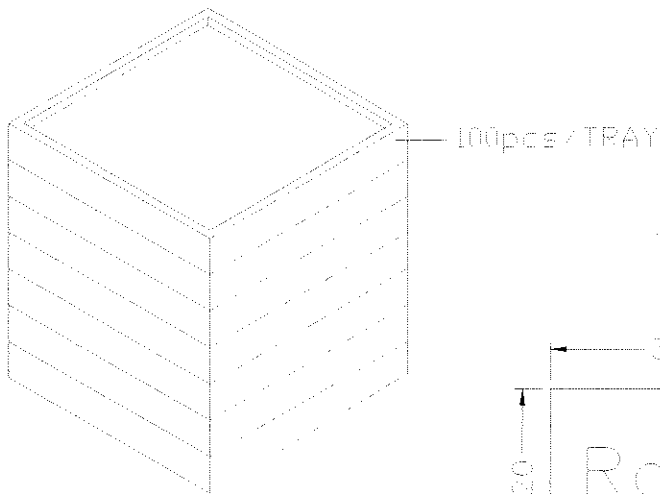
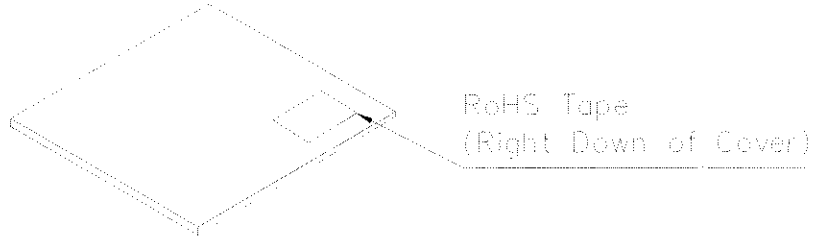
Electroacoustic  
Testing Adapter



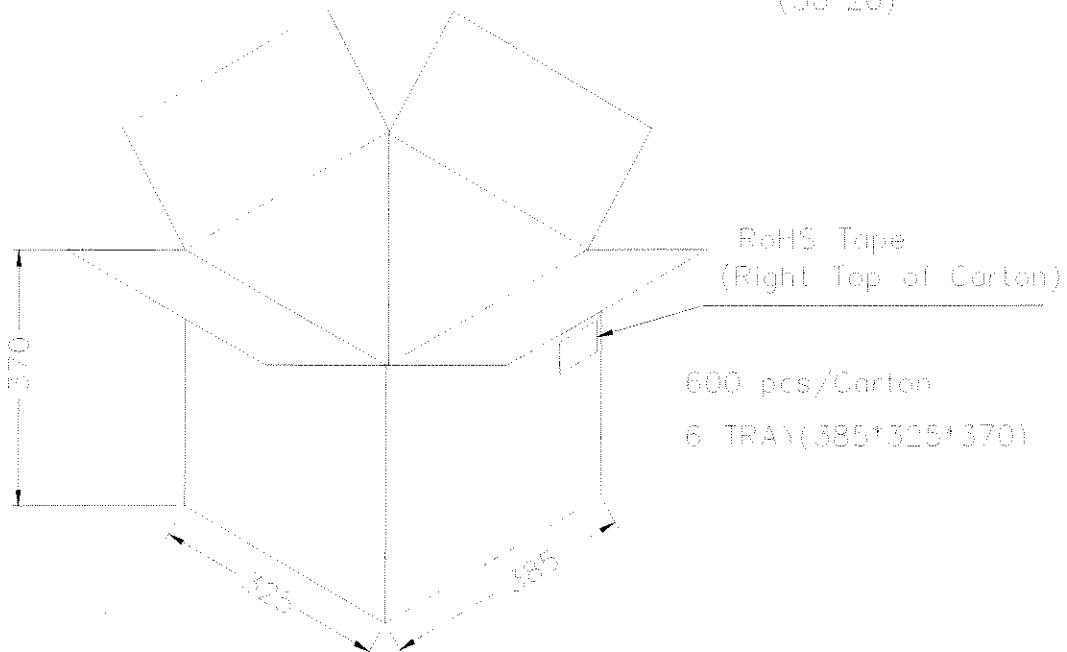
#### 4.2 Standard Baffle



### 5. Packing

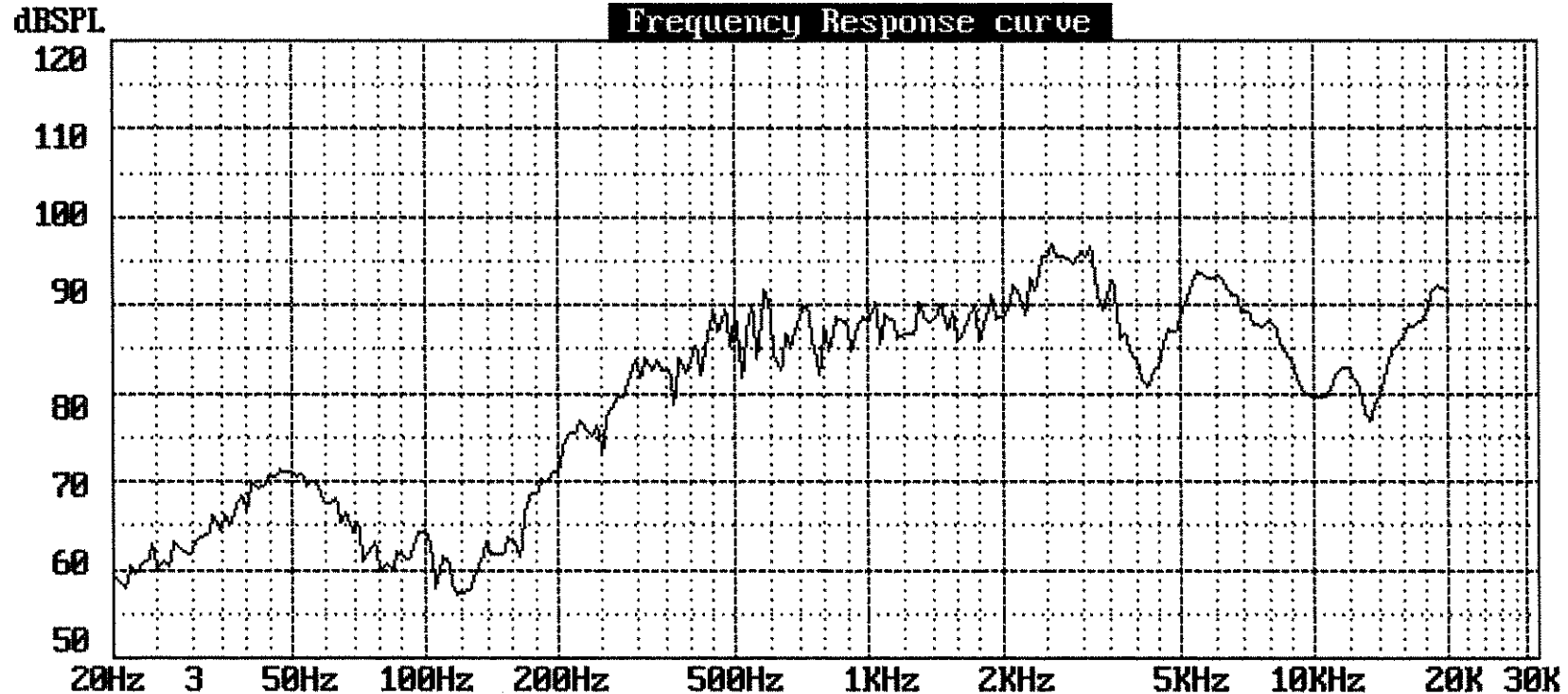


RoHS Tape  
(30\*20)



Firm:OBO Model: DATE:07-22-2009 TIME:11:00:14  
1000Hz Sens.= 88.1dB SPL Pass F.R.: Pass DCR: 4.40Ω Pass  
Average SPL: 87.7dB SPL Pass (1000;1200;1500; 2000Hz) Sweep Speed: 1/24 Oct.

B 6.18



Voltage applied for **F.R.** = 2.000V **Start F.** = 20Hz **Stop F.** = 20000Hz  
Measuring Distance = 0.50M

Mfg.:

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