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SPECIFICATIO

LEAD

MICRO SPEAKER

ASC2045AW1

Revision history

Rev.0 2005. 10. 13.

	Drafted by	Checked by	Approved by
Name			
Signature			
Date			

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SES - SCS - 024		COILMASTER	 CoilMaster Co., Ltd.	

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1. Product Outline

1.1 Scope

This Specification applied to the dynamic speaker for cellular handset.

1.2 Mechanical Drawing With Dimensions

As shown in FIG.3.

1.3 Appearance

Should not exist any obstacles to be harmful to normal operation, from damage, cracks, rusts and distortion

1.4 Weight :Approx. 3.2gr ± 0.2gr

1.5 Operating Temperature : -30 °C to +80 °C

1.6 Storage Temperature : -40 °C to +80 °C

2. Standard Test Condition

2.1 Temperature :20 °C ~ 25 °C

2.2 Relative Humidity :50% ~ 70% (RH)

3. Electrical & Acoustical Characteristics

3.1 Sound Pressure Level

92 ± 3 dB [0.1m/0.1W] At 0.8 kHz, 1.0 kHz, 1.2 kHz, 1.5 kHz Average. 0.89Vms (Sine wave)

3.2 Impedance : 8 Ω ± 15% ohm at 1V, 2 kHz

3.3 Input Power (nom./max.)

0.5W /Must Be Normal at (1.0W) White Noise For 1Minute

3.4 Measuring Circuit : As shown Fig.1

3.5 Lowest Resonance Frequency (Fo.) : 800 Hz ± 20% at Fo Hz 1.0Vrms (Sine wave)

3.6 Frequency Range :800 Hz~20kHz

3.7 Frequency Response Curve : Shown in Fig.2

3.8 Distortion :Less than 10% at 1 kHz , 0.5W

3.9 Buzz & Rattle

There shall be no buzzes, rattles, nor spurious noises when the input power shall be set at 2.0V(rms)

(at 1 kHz) from 800Hz to 20 kHz

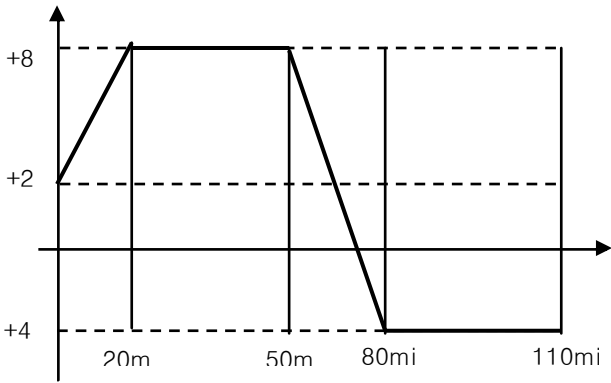
3.10 Polarity

When a positive DC current is applied to the terminal marked "+" diaphragm shall move forward.

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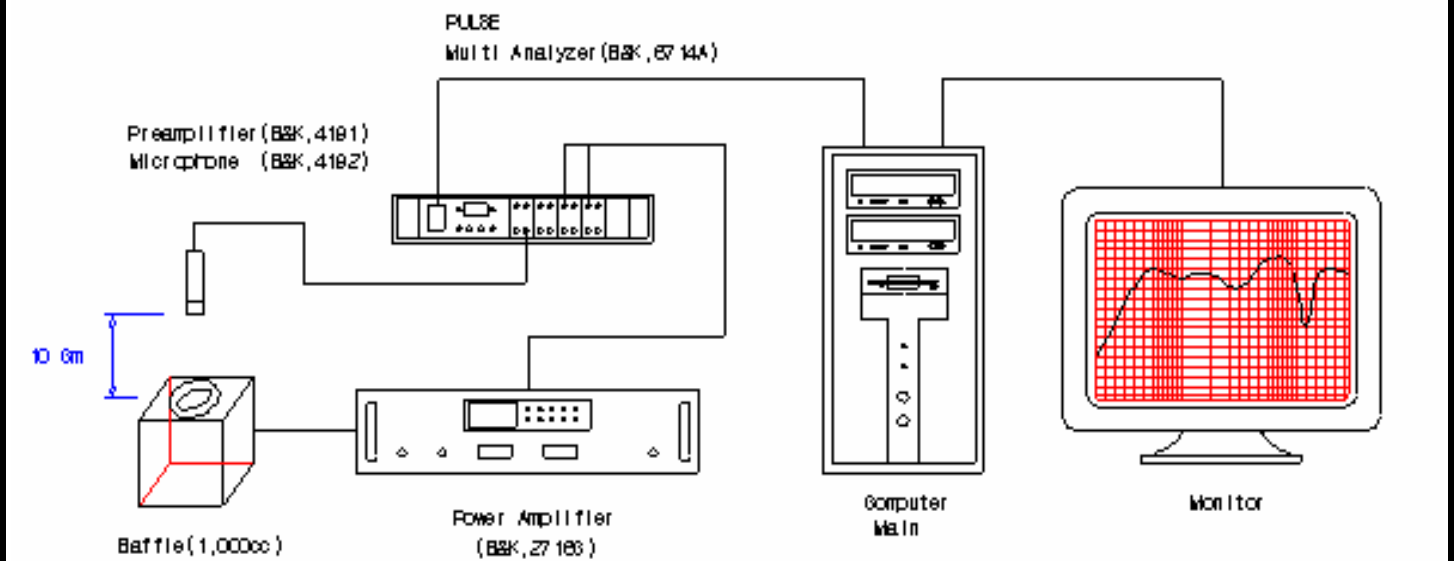
4. Reliability test condition

4.1 Test condition

Reliability test	Test item	Condition
	High temperature test	After test, the sensitivity difference shall be within ± 3 dB at 1 kHz TEMPERATURE : + 80°C, DURATION : 96 hours
	High temperature & Humidity test	After test, the sensitivity difference shall be within ± 3 dB at 1 kHz TEMPERATURE : +80 \pm 3°C, Humidity : 80 %(RH), DURATION : 24 hours
	Low temperature test	After test, the sensitivity difference shall be within ± 3 dB at 1 kHz TEMPERATURE : - 40°C, DURATION : 96 hours
	Temperature cycle test	After test, the sensitivity difference shall be within ± 3 dB at 1 kHz TEMPERATURE : - 40°C ~ + 80 °C, DURATION : 9 hours , CYCLE : 6 Cycle 
	Humidity test	After test, the sensitivity difference shall be within ± 3 dB at 1 kHz TEMPERATURE : + 40°C, Humidity : 90 %(RH), DURATION : 96 hours
	Insulation Test	1) Withstand voltage : AC 100V for Min between the terminal and case housing. 2) Insulation Resistance : 1Mohm at DC 100V between the terminal and case housing.
	Drop test	Free-drop each 6 side of dummy 100g on steel surface 1.0 cm thickness by 3 times. from the height of 1.5m and then should satisfy the tests listed on specifications 1.3 / 3.9
	Load test	0.5W white noise is applied for 96 hours application of - filtered signal and satisfy the tests listed on specifications 1.3 / 3.1 / 3.2 / 3.5 / 3.9

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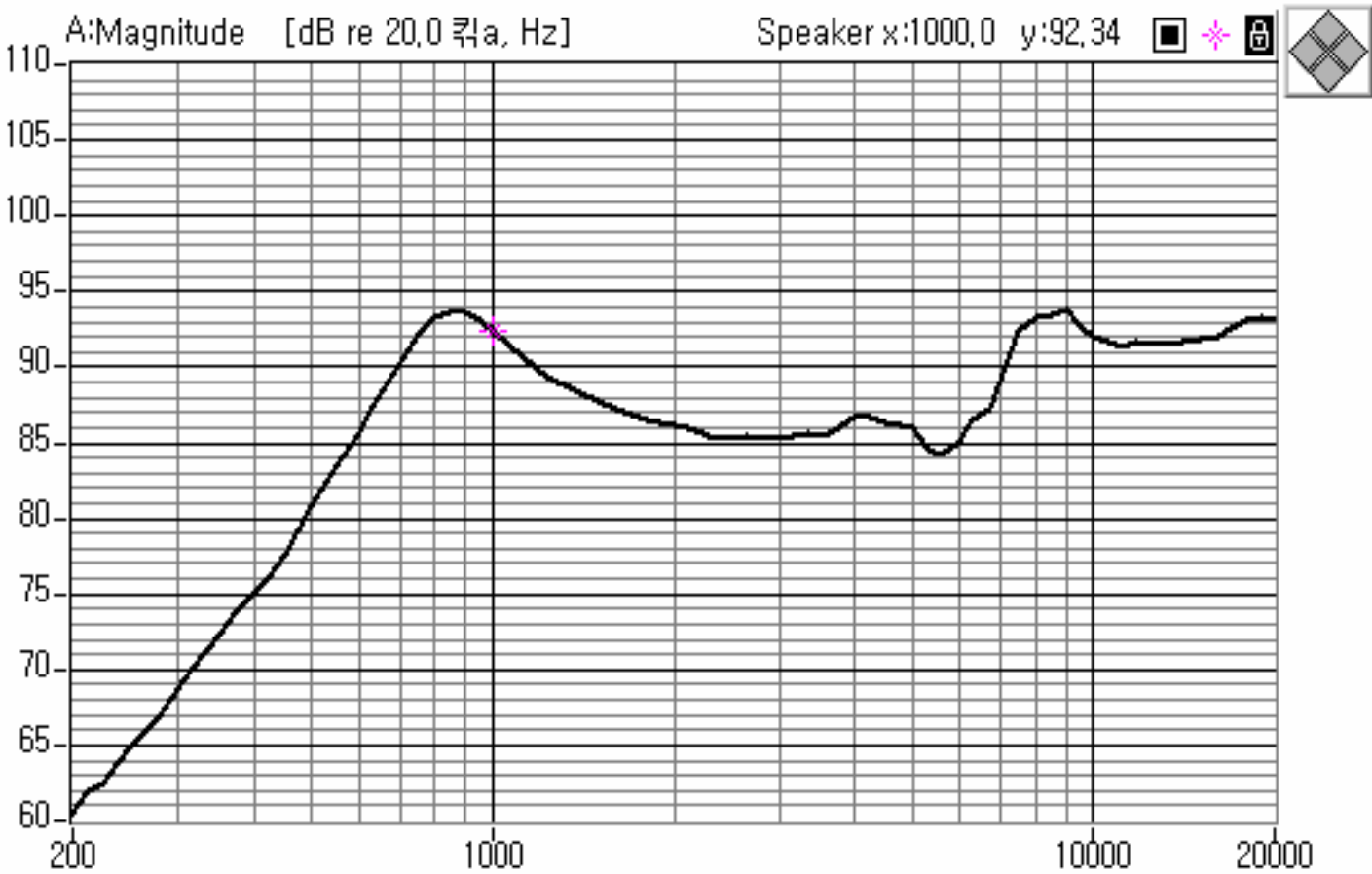
5. Measuring circuit



(FIG. 1.

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6. Frequency response curve



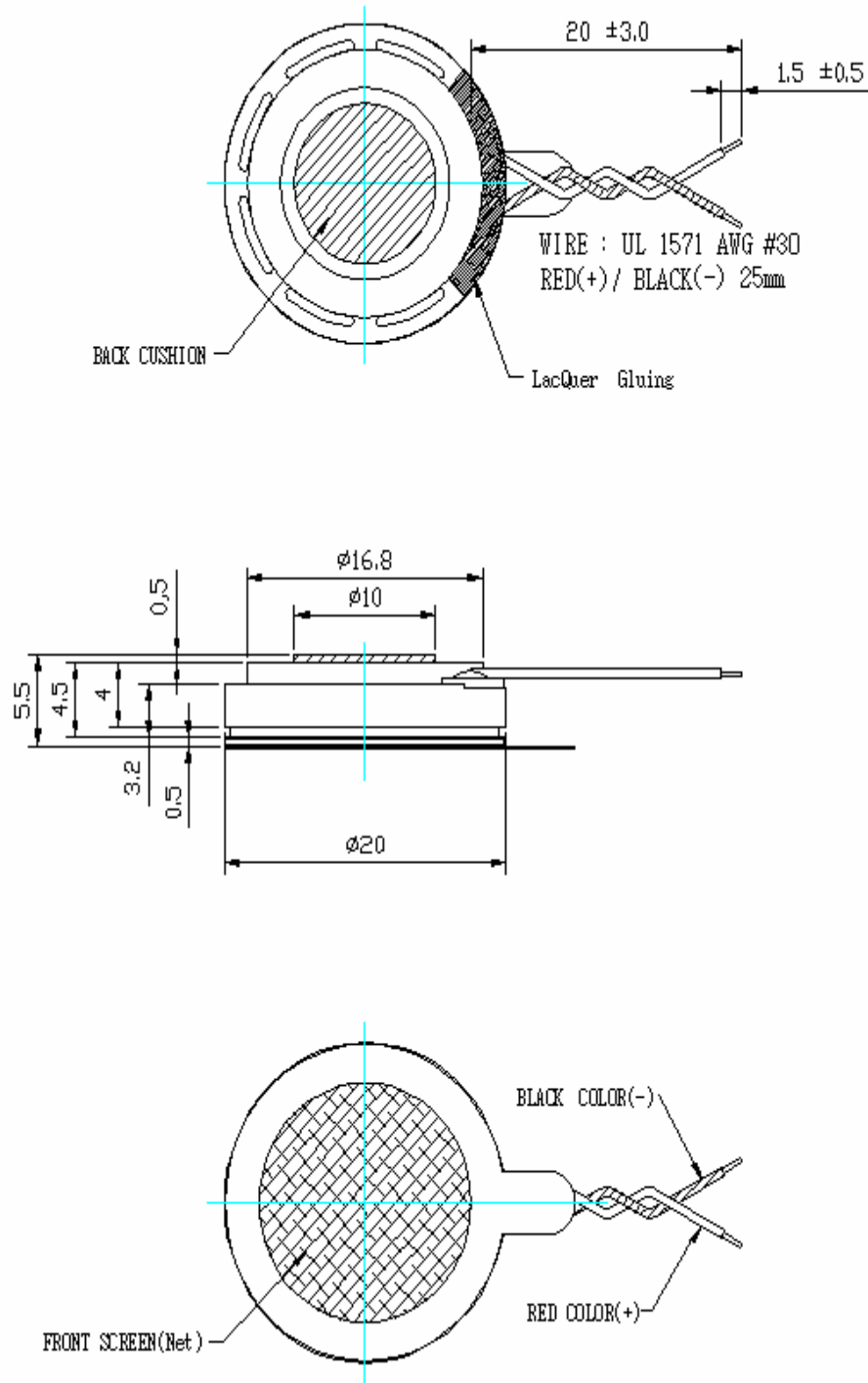
(FIG. 2.)

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7. Dimension

TOLERANCE : ± 0.2

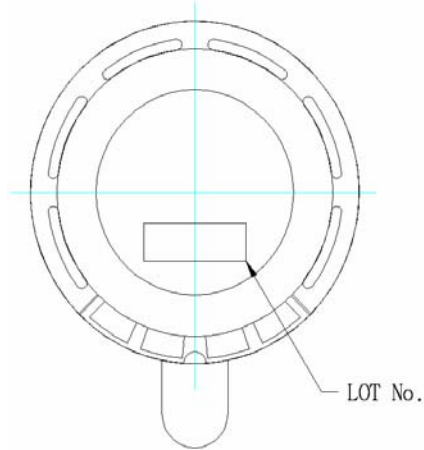
UNIT : mm



(FIG.3.)

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8. Marking



MARKING STAMP

LOT NO.

YEAR		MONTH		WEEK	
5	2005	1	A	1	1st
6	2006	2	B	2	2nd
7	2007	3	C	3	3rd
8	2008	4	D	4	4th
9	2009	5	E	5	5th
-	-	6	F	-	-
-	-	7	G	-	-
-	-	8	H	-	-
-	-	9	I	-	-
-	-	10	J	-	-
-	-	11	K	-	-
-	-	12	L	-	-

(EXAMPLE) 5A2

5 ⇒2005(YEAR)

A ⇒JANUARY

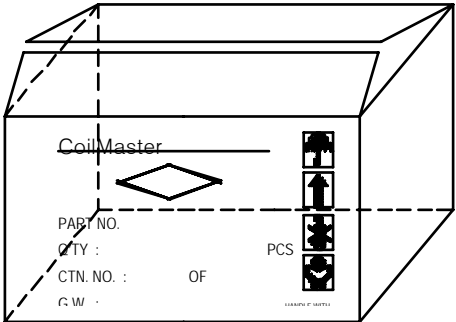
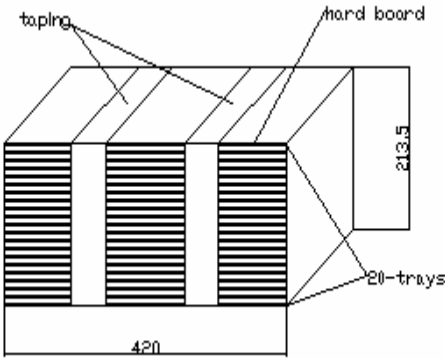
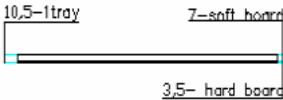
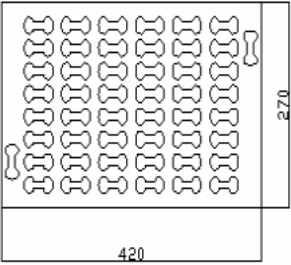
2 ⇒2nd WEEK

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9. Packing

Packing Type

1 tray = 100 p.c.s
1 box = 20 tray



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10. Part Lists

Model	ASC2046AW1	Set Part No.	
Application	MICRO SPEAKER	CHARGE	LEE. H. C
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No	Q`ty	Unit	Part Name	Descriptions
1	1	EA	FRAME	PBT
2	1	EA	FRONT CAP	SUS304
3	1	EA	DIAPHRAGM	PEI
4	1	EA	V/COIL	Cu
5	1	EA	TERMINAL	Epoxy
6	1	EA	MAGNET	NdFeB
7	1	EA	TOP PLATE	SPC
8	1	EA	YOKE	SPC
9	1	EA	FRONT CUSHION	MESH
10	1	EA	BACK CUSHION	PORON
11	2	EA	LEAD WIRE	UL1571 AWG #30 23mm RED(+), BLACK(-)
12		EA		
13		EA		
14		EA		
15		EA		
16		EA		
17		EA		