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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			

Customer		SPECIFICATION	REVISION	0
			DATE	05.10.13
COILMASTER P/N	ASC2045AW1	MICRO SPEAKER	PAGE	2 / 10

Revision

REVISION	Date	Page	Description
0	05. 10. 13		First Issue

Contents

1. PRODUCT OUTLINE

- 1.1 Scope
- 1.2 Mechanical draawing with dimensions
- 1.3 Weiht
- 1.4 Operating temperature
- 1.5 Storage temperature

2. STANDARD TEST CONDITION

- 2.1 Temperature
- 2.2 Relative humidity

3. ELECTRINCAL & ACOUSTICAL CHARACTERISTICS

- 3.1 Sound pressure level
- 3.2 Impedance
- 3.3 Input power (nom./max)
- 3.4 Measuring circuit
- 3.5 Lowest resonance frequency (Fo.)
- 3.6 Frequency range
- 3.7 Frequency response curve
- 3.8 Distortion
- 3.9 Buzz & Rttle
- 3.10 Polarity
- 3.11 Appearance

Customer		SPECIFICATION	REVISION	0
			DATE	05.10.13
COILMASTER P/N	ASC2045AW1	MICRO SPEAKER	PAGE	3 / 10

Contents

4. RELIABILITY TEST

- 4.1 High temperature test
- 4.2 Low temperature test
- 4.3 Temperature cycle test
- 4.4 Humidity test
- 4.5 Vibration test
- 4.6 Drop test
- 4.7 Load test

5. MEASURING CIRCUIT

6. FREQUENCY RESPONSE CURVE

7. DIMENSION

8. MARKING

9. PACKING METHOD

10. PART LISTS

11. PROCESS

Customer		SPECIFICATION	REVISION	0
			DATE	05.10.13
COILMASTER P/N	ASC2045AW1	MICRO SPEAKER	PAGE	4 / 10

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

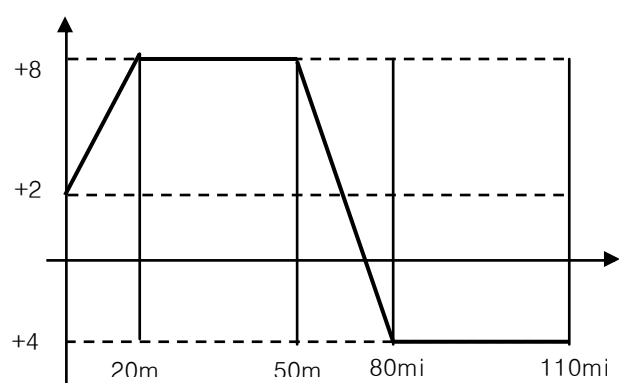
3.10 Polarity

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

Customer		SPECIFICATION	REVISION	0
			DATE	05.10.13
COILMASTER P/N	ASC2045AW1	MICRO SPEAKER	PAGE	5 / 10

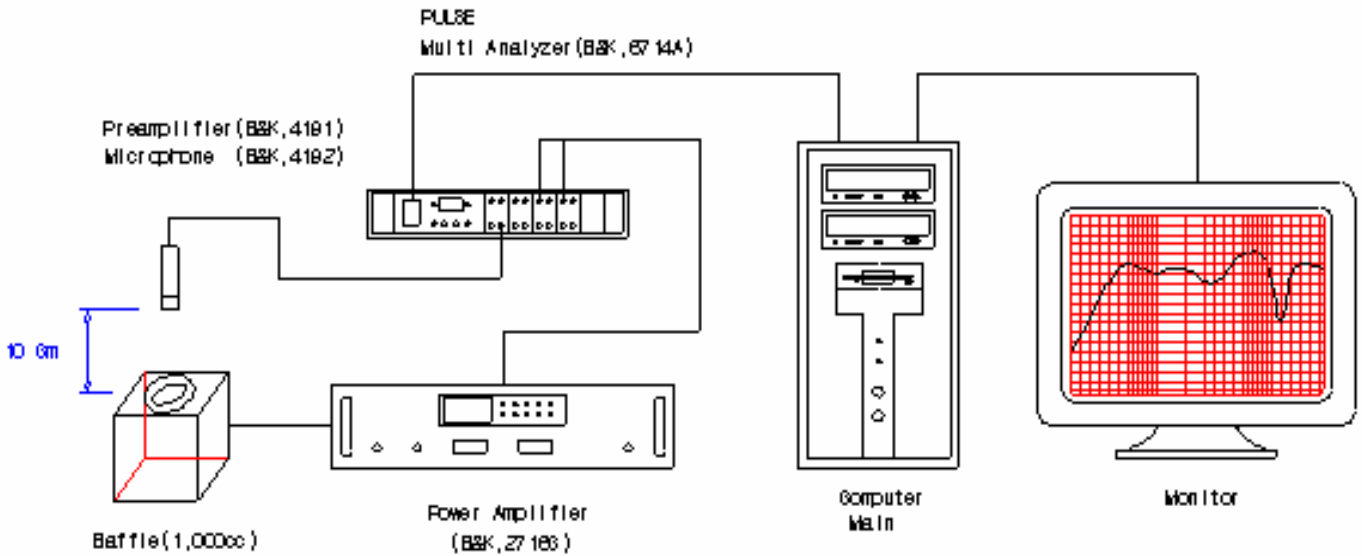
4. Reliability test condition

4.1 Test condition

Reliability test	Test item	Condition
		High temperature test
	High temperature & Humidity test	After test, the sensitivity difference shall be within ± 3 dB at 1 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 TEMPERATURE : - 40°C, DURATION : 96 hours
	Temperature cycle test	After test, the sensitivity difference shall be within ± 3 dB at 1 TEMPERATURE : - 40°C ~ + 80 °C, DURATION : 9 hours , CYCLE : 6 Cycle  <p>The graph shows a temperature cycle test profile. The vertical axis represents temperature in degrees Celsius, with marked values at +8, +2, and +4. The horizontal axis represents time in minutes, with marked values at 20m, 50m, 80mi, and 110mi. The cycle starts at +2°C, rises to +8°C, dwells for 20 minutes, then falls to -4°C, dwells for 50 minutes, rises to +8°C, dwells for 20 minutes, falls to -4°C, dwells for 80 minutes, and finally rises to +8°C. Dashed lines indicate the temperature levels and dwell times.</p>
	Humidity test	After test, the sensitivity difference shall be within ± 3 dB at 1 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

Customer		SPECIFICATION	REVISION	0
			DATE	05.10.13
COILMASTER P/N	ASC2045AW1	MICRO SPEAKER	PAGE	6 / 10

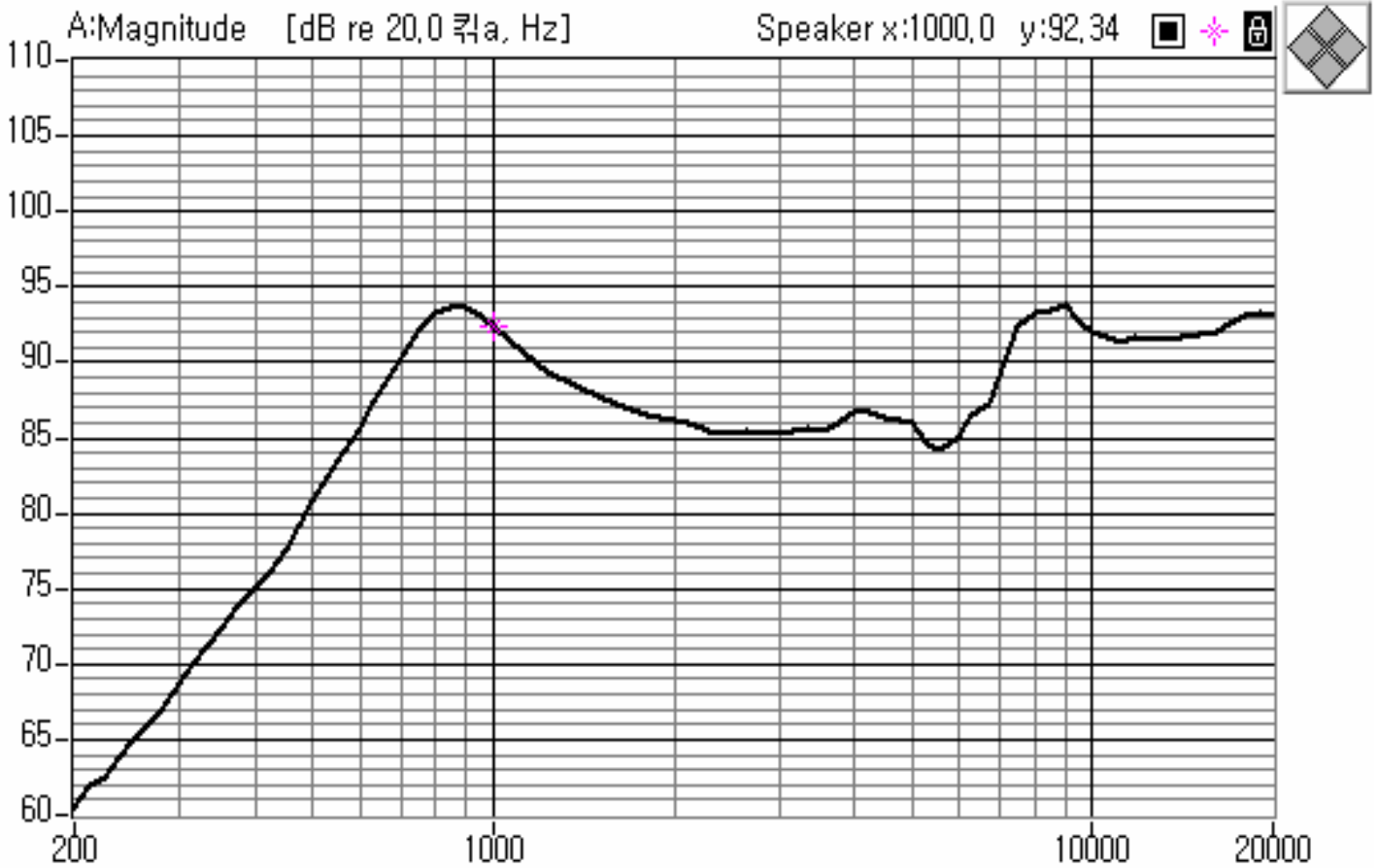
5. Measuring circuit



(FIG. 1.

Customer		SPECIFICATION	REVISION	0
			DATE	05.10.13
COILMASTER P/N	ASC2045AW1	MICRO SPEAKER	PAGE	6 / 10

6. Frequency response curve



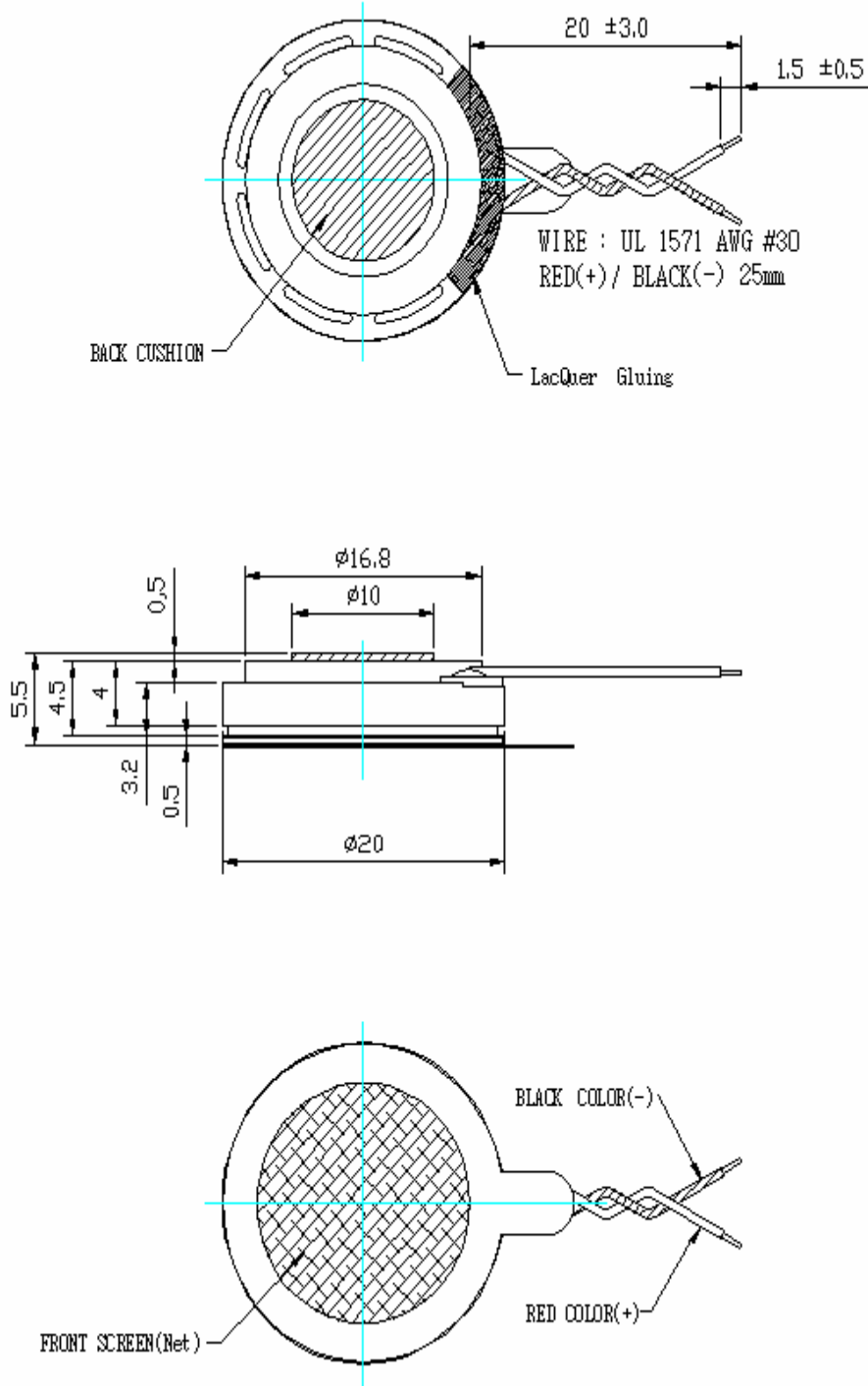
(FIG. 2.)

Customer		SPECIFICATION	REVISION	0
			DATE	05.10.13
COILMASTER P/N	ASC2045AW1	MICRO SPEAKER	PAGE	7 / 10

7. Dimension

TOLERANCE : ± 0.2

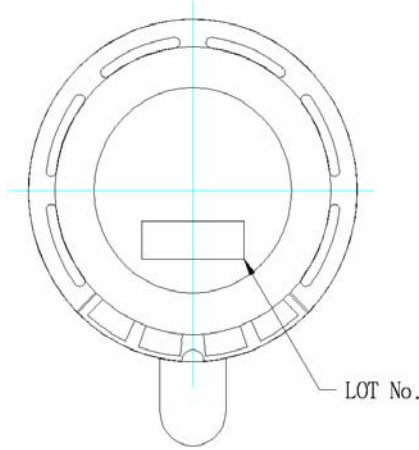
UNIT : mm



(FIG.3.)

Customer		SPECIFICATION	REVISION	0
			DATE	05.10.13
COILMASTER P/N	ASC2045AW1	MICRO SPEAKER	PAGE	8 / 10

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

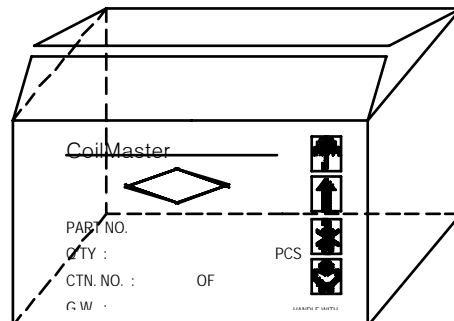
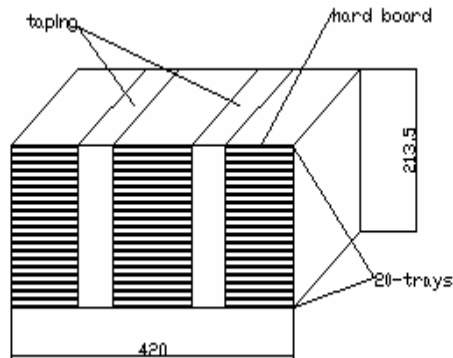
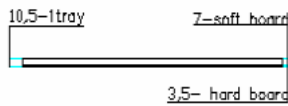
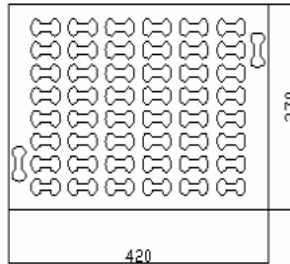
Customer		SPECIFICATION	REVISION	0
			DATE	05.10.13
COILMASTER P/N	ASC2045AW1	MICRO SPEAKER	PAGE	9 / 10

9. Packing

Packing Type

1 tray = 100 p.c.s

1 box = 20 tray



Customer		SPECIFICATION	REVISION	0
			DATE	05.10.13
COILMASTER P/N	ASC2045AW1	MICRO SPEAKER	PAGE	10 / 10

10. Part Lists

Model	ASC2046AW1	Set Part No.	
Application	MICRO SPEAKER	CHARGE	LEE. H. C
Date	2005. 10. 13	Page	1 / 1

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		