

## SPECIFICATIONS SHEET FOR APPROVAL

CONDENSER MICROPHONE  
P/N: OM6013CF423P

**DESCRIPTION: D6mm, H1.3mm Condenser Microphone, Omni-Directional, -42 ± 3dB, Pin-type, RoHS Compliance (Directive 2002/95/EC)**

**VERSION: 04**

**DATE: 7-Sep-2010**

### REVISIONS

VERSION	DESCRIPTION	DATE
01	Released from engineering	25-Mar-10
02	Remove Impedance, Add terminal material, Soldering condition and packing information	2-Sep-10
03	Updated dimension drawing	6-Sep-10
04	Updated packing information	7-Sep-10

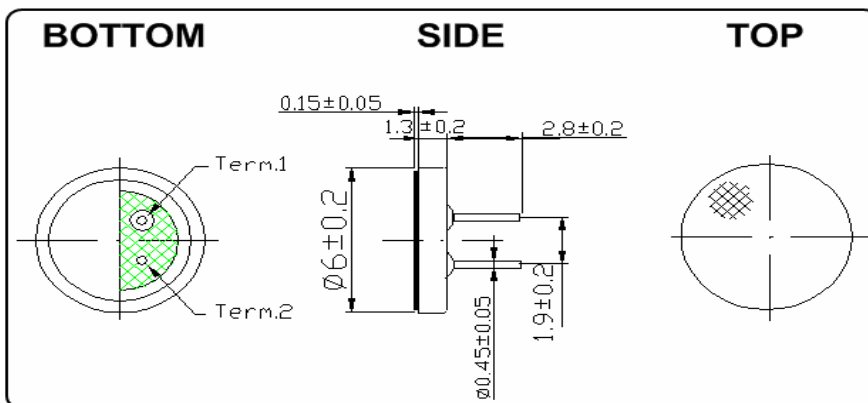
## SPECIFICATIONS SHEET

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P/N: OM6013CF423P

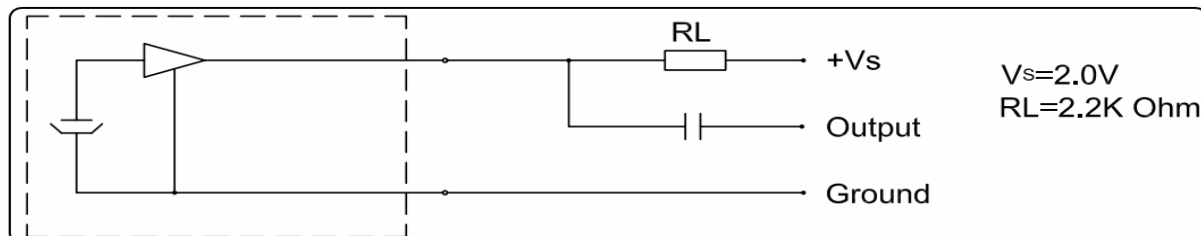
### 1. SPECIFICATIONS

PARAMETERS	VALUES	UNITS
DIRECTIVITY	Omni-Directional	-
SENSITIVITY ( 0 dB = 1 V/pa AT 1 KHz )	-42 ± 3	dB
FREQUENCY RANGE	50 - 16,000	Hz
MAX OPERATING VOLTAGE	10	V
STANDARD OPERATION VOLTAGE (Vs)	2	V
RESISTANCE LOADING (RL)	2.2K	Ohm
MAX CURRENT CONSUMPTION	0.5	mA
S/N RATIO	>60	dB
TERMINAL MATERIAL	GOLD PLATED BRASS	-
OPERATING TEMPERATURE	-20 to +60	°C
STORAGE TEMPERATURE	-40 to +70	°C

### 2. DIMENSIONS (unit in mm)



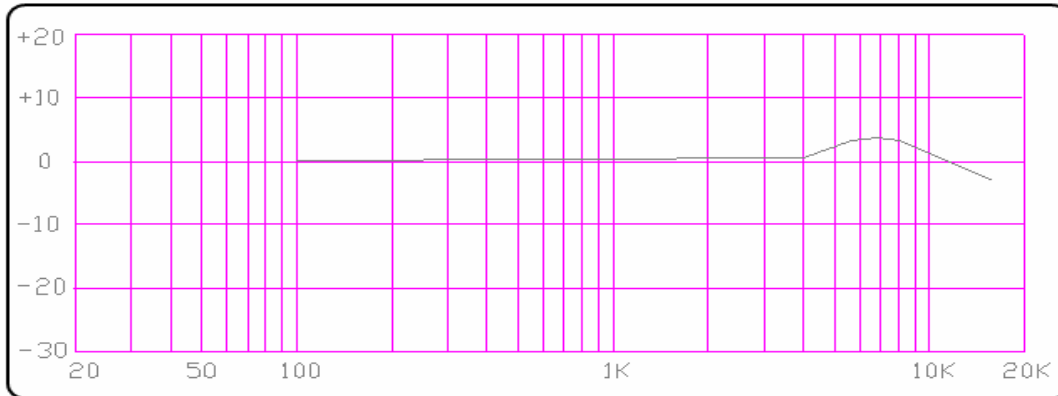
### 3. DRIVING CIRCUIT



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#### 4. TYPICAL FREQUENCY RESPONSE



#### 5. RELIABILITY TEST

(After any tests, the sensitivity to be within  $\pm 3\text{dB}$  of initial sensitivity)

##### 1) Temperature Test

- After exposure at  $+70^{\circ}\text{C}$  for 200 hours, sensitivity must not varied more than  $\pm 3\text{dB}$  from Initial sensitivity.
- After exposure at  $-20^{\circ}\text{C}$  for 200 hours, sensitivity must not varied more than  $\pm 3\text{dB}$  from Initial sensitivity.  
(The measurement to be done after 2 hours of conditioning at  $20^{\circ}\text{C}$ , R.H 50% for recovering)

##### 2) Temperature Cycle Test

After exposure at " $70^{\circ}\text{C}$  for 60 minutes, at  $20^{\circ}\text{C}$  for 60 minutes, at  $-25^{\circ}\text{C}$  for 60 minutes, at  $20^{\circ}\text{C}$  for 60 minutes" for 5 cycles, sensitivity must not be varied more than  $\pm 3\text{dB}$  from initial sensitivity.

##### 3) Humidity Test

After exposure at  $+60 \pm 2^{\circ}\text{C}$ , 90%RH for 200 hours, sensitivity must not be varied more than  $\pm 3\text{dB}$  from initial sensitivity.  
(The measurement to be done after 2 hours of conditioning at  $20^{\circ}\text{C}$ , R.H 50% for recovering)

##### 4) Vibration Test

The Microphone unit must be subjected to each 2 hours vibrations at three axes 2mm dynamic range, 10~50hz/minute.

##### 5) Drop Test

The Microphone unit without package must be subjected to each 3 drops at three axes from the height Of 1 meter to 20 mm thick hardwood board.

#### 6. SOLDERING CONDITION

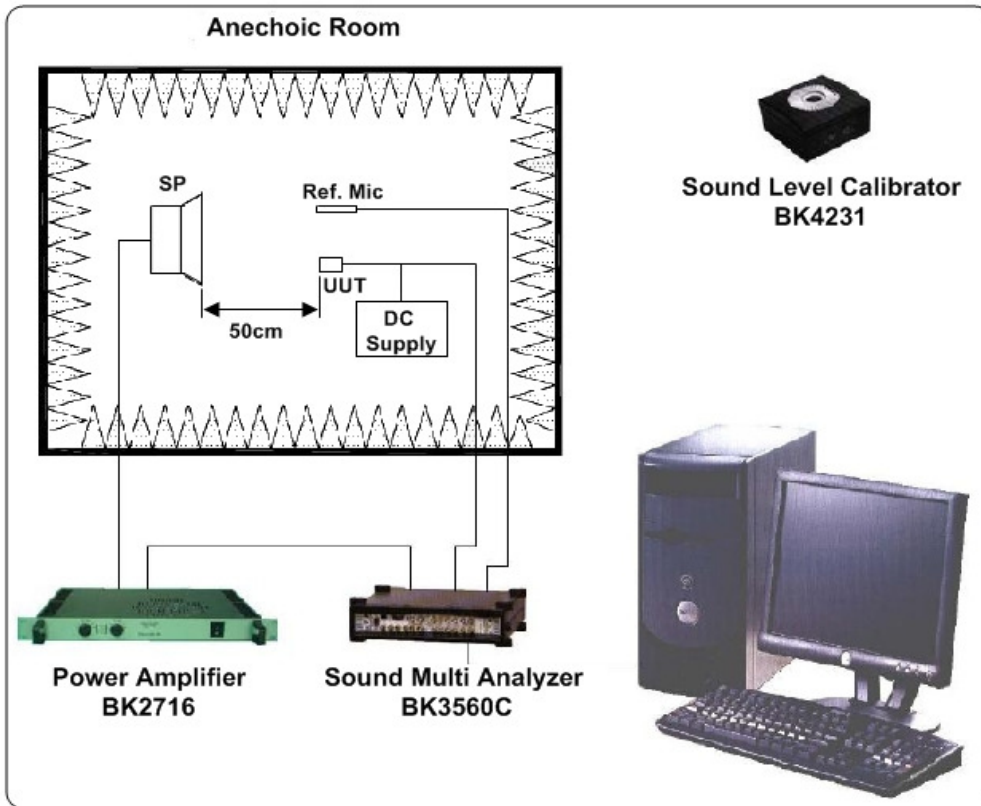
Soldering Temp. :  $330 \pm 5^{\circ}\text{C}$  within 2 sec  
(This model is not suitable for wave soldering)

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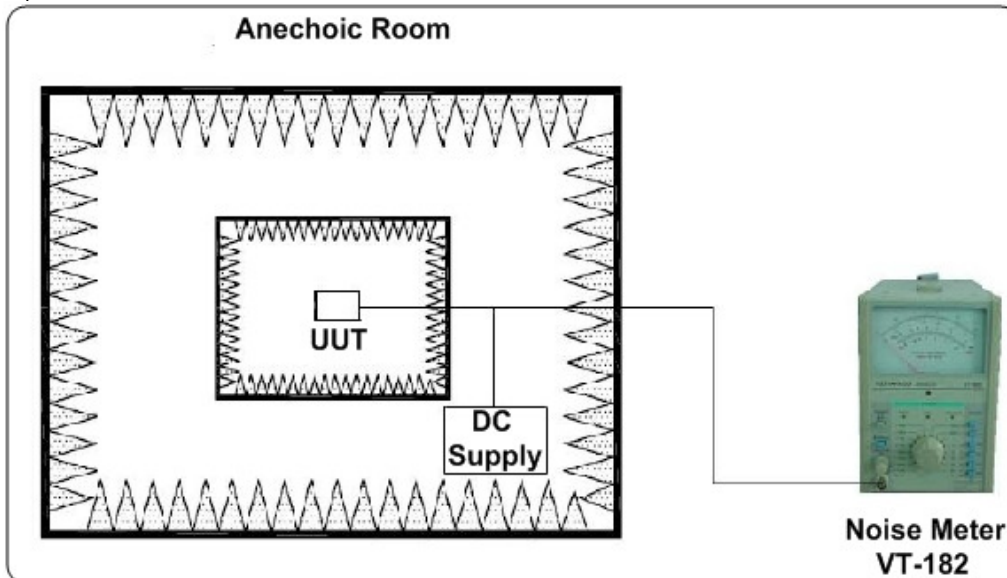
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**7. MEASUREMENT SYSTEM:**

1) Standard Frequency Response Test



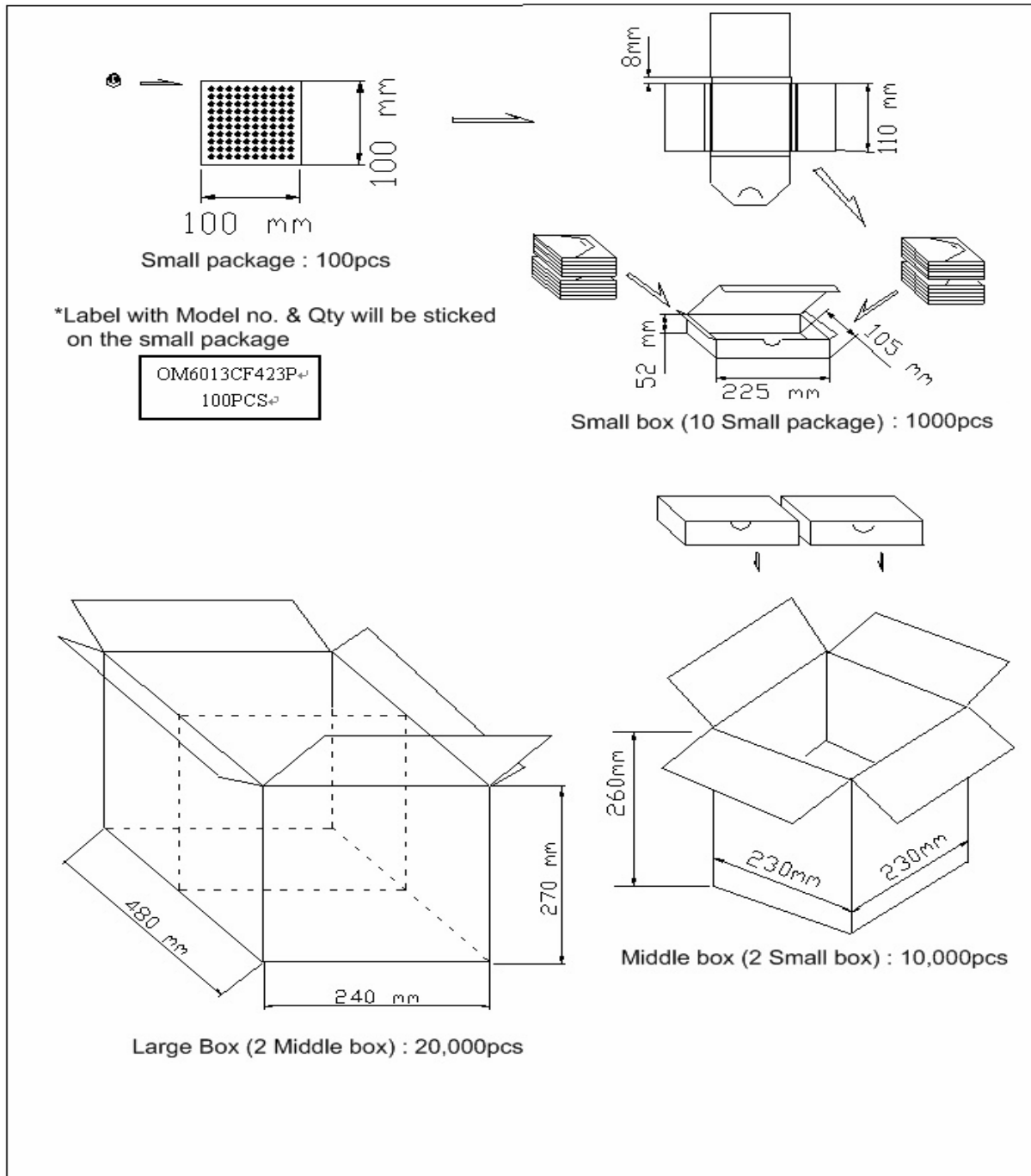
2) S/N Ratio Test



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8. PACKING INFORMATION:



G.W : 3.3Kg  
N.W: 2.8Kg

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