

# YDF6015C10&33-56 datesheet

**MODEL NUMBER: YDF6015C10&33-56**

**Date: Apr-02/2013**

**DESCRIPTION:  $\Phi 6.0 \times 1.5\text{mm}$   $-56 \pm 3\text{dB}$  4.5V 2.2K $\Omega$**

## **Electrical Characteristics:**

**Operation condition: Ambient temperature:  $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$ ; Relative humidity:  $\leq 85\%$**

**Storage condition: Ambient temperature:  $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$ ; Relative humidity:  $45\% \sim 75\%$**

**Sensitivity :  $-56 \pm 3\text{ dB}$  (0dB=1V/Pa, 1 KHz)**

**Sensitivity reduction:  $-3\text{ dB}$  (F=1KHz Pin=1Pa)**

**Standard Operation Voltage: 1.5 VDC**

**Max. Operation Voltage: 10 VDC**

**Output Impedance: 0.96K $\Omega$ (f=1KHz Pin=1Pa)**

**Frequency: 70Hz to 1000Hz**

**Max. Current Consumption: 500uA(f=1KHz Pin=1Pa)**

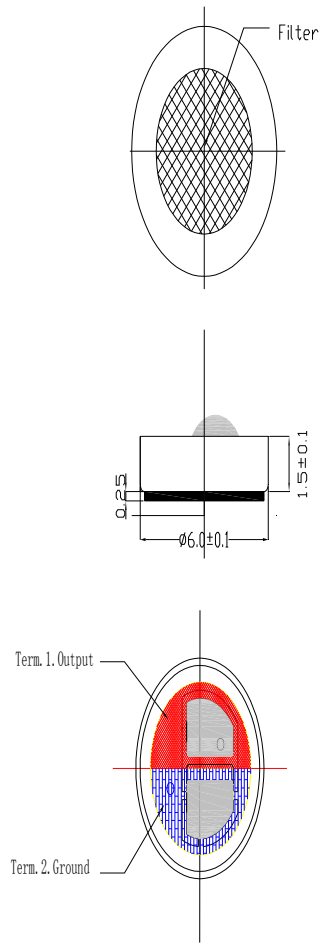
**Signal to noise ratio: 58 dB(f=1KHz Pin=1Pa A=cure)**

**Housing Material: AL**

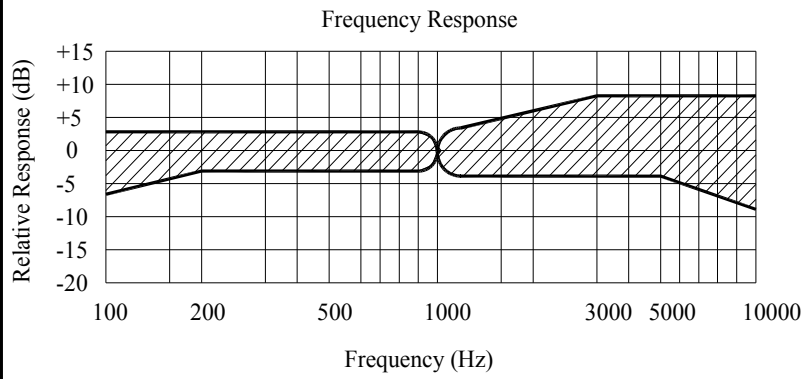
**Regulations: ROHS, REACH**

# Appearance Drawing

Unit:mm



# Frequency Response



Microphone Response Tolerance Window

| Frequency (Hz) | Lower (dB) | Upper (dB) |
|----------------|------------|------------|
| 100            | -6         | +3         |
| 200            | -3         | +3         |
| 900            | -3         | +3         |
| 1000           | 0          | 0          |
| 1100           | -3         | +3         |
| 3000           | -3         | +8         |
| 5000           | -3         | +8         |
| 10000          | -8         | +8         |

# Microphone test setup

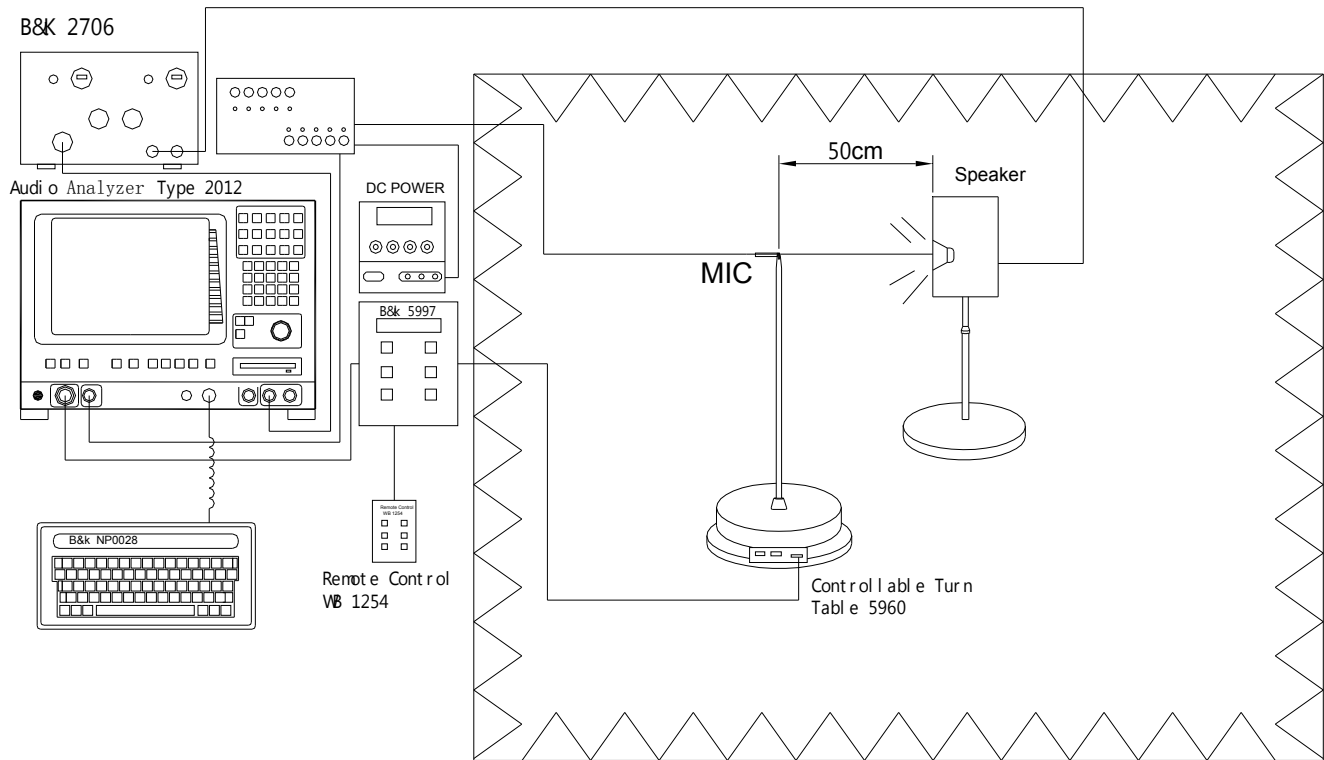


Figure 2: Microphone test setup for L=50cm test

# Measuring circuit (Test Condition $V_s=4.5V$ $R_L=2.2K\Omega$ $T_a=20^\circ C$ )

