

規格承認書

PECIFICATION FOR APPROVAL

客戶
CUSTOMER : 立創

項目
ITEM : 超声波传感器

型號
TYPE : GU1409A-40TR

描述
DESCRIPTION : $\varnothing 14 \times H9.0\text{mm}$ 40KHz 160mV 角度 60+/-10% 1800pF

客戶料號
CUSTOMER NO. :

規格書號
SPECIFICATION NO. :

版本
EDITION NO. : V1.1

日期
DATE : 2016-4-5

客戶承認

CUSTOMER CONFIRM AND SIGN

檢查 TESTED BY	審核 CHECKED BY	承認 APPROVED BY

東莞市贏海電子有限公司

DONGUAN INGHAI ELECTRONICS CO.,LTD

製作 ISSUED BY	審查 CHECKED BY	確認 APPROVED BY
周明	刘承成	

地址：廣東省東莞市長安鎮上沙第五工業區新春 1 路新春科技园

電話 / TEL : 0769-83060958 傳真 / FAX : 0769-81608993

網址 : [HTTP://WWW.INGHAI.COM](http://www.inghai.com)

A. Scope

This specification applies Ultrasonic sensor **GU1409A-40TR**

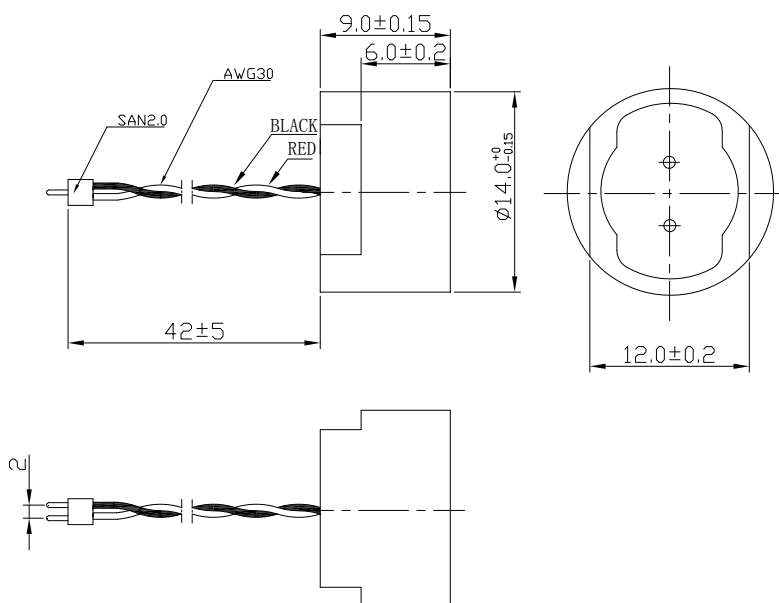
B. Characteristics

- 1.1) Open structure and separate use
- 1.2) Compact and light weight
- 1.3) High sensitivity and sound pressure
- 1.4) Less power consumption
- 1.5) High reliability

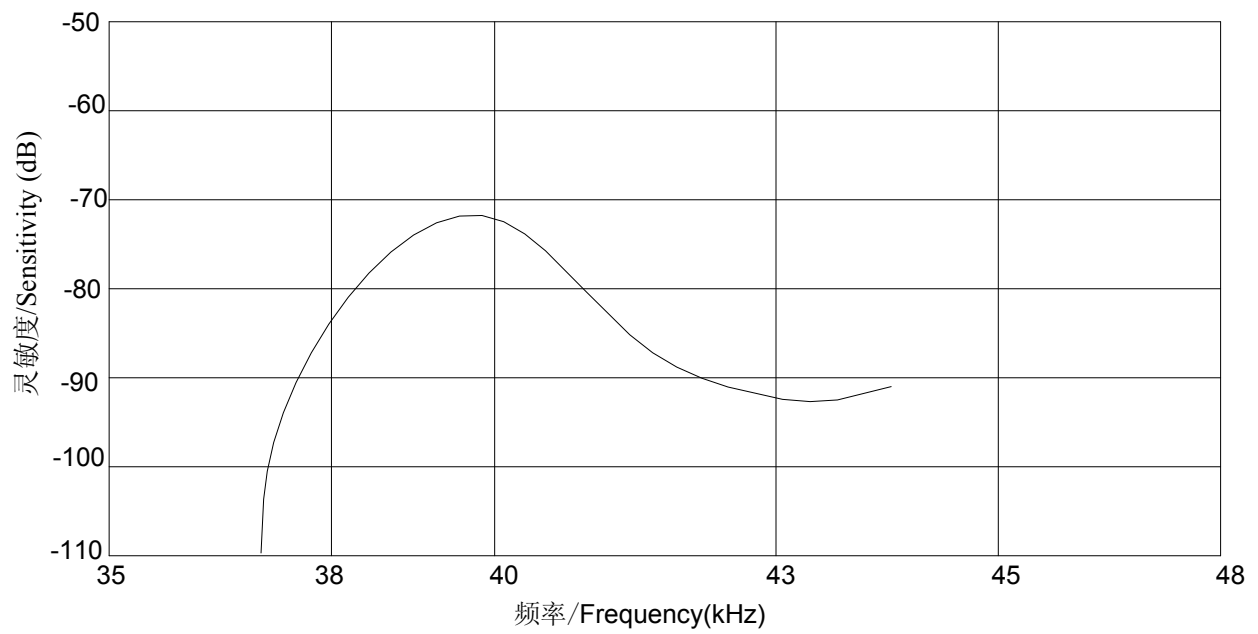
C. Technical terms

1	Center frequency(KHz)	40±1.0KHz
2	Sound Pressure Level (dB) 0dB=0.0002μbar	>100dB
3	Sensitivity (dB) 0dB=1 volt/μbar	>-74dB
4	Echo Sensitivity	≥160mV
5	Decay Time	≤1.2ms
6	Directivity (deg) X-axis	120±15
7	Directivity (deg) Y-axis	60±10
8	Capacitance (pF)	1800±15%
9	Allowable Maximum Input Voltage(Vp-p)	140(40KHz) Pulse width 0.5ms, interval 20ms
10	Operating Temperature(°C)	-40~+80
11	Storage temperature(°C)	-40~+85

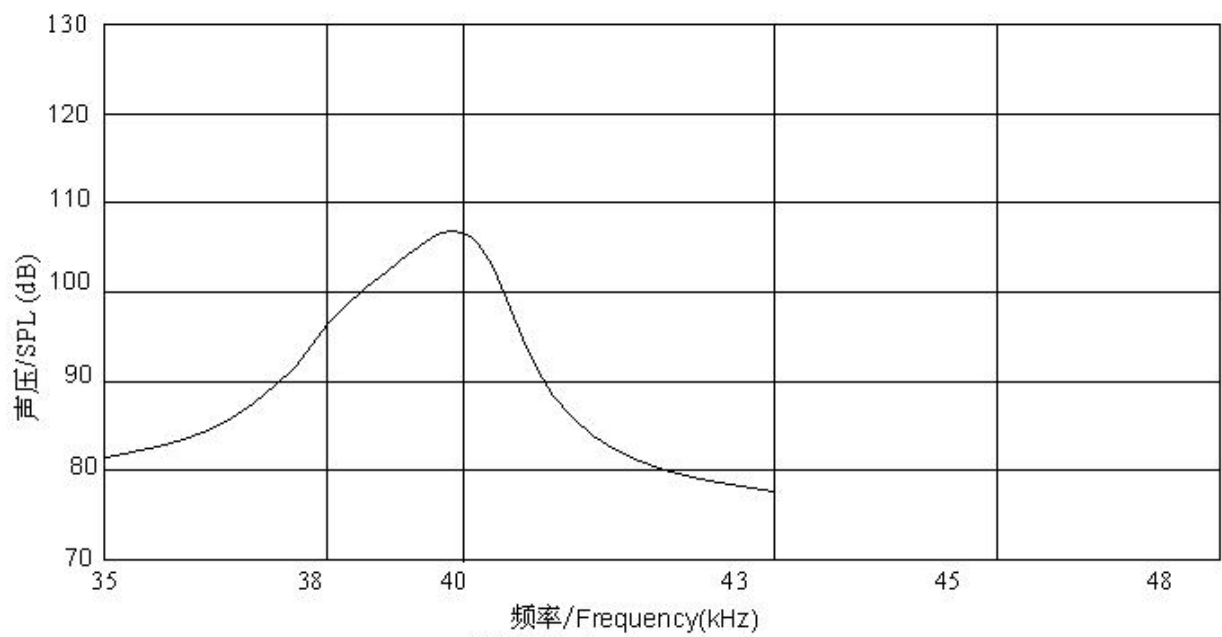
D .Drawing



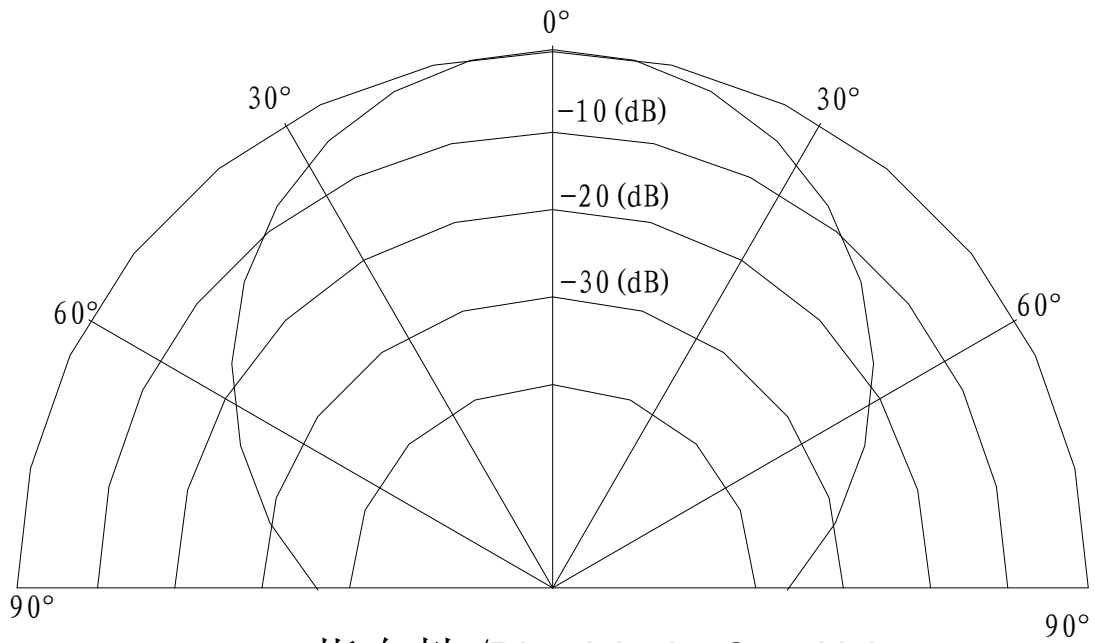
E. Beam Pattern



灵敏度-频率特性图/Sensitivity-Freq.Characteristics



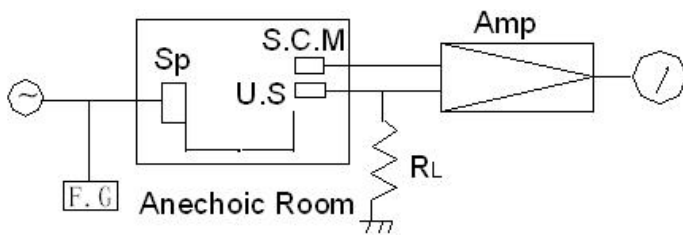
声压-频率特性图/SPL-Freq.Characteristics



指向性/Directivity in Sensitivity

F. Test Circuit

Receiver



RL: $3.9K\Omega$

U.S. :Ultrasonic Sensor

S.C.M:Standard Cappacitor Microphone

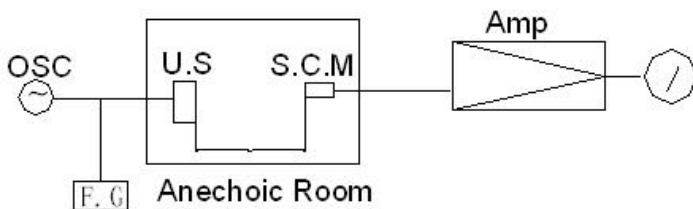
Amp. :Amplifier

OSC. :Oscillator

Sp :Tweeter

F.C. :Frequency Counter

Transmitter



U.S. :Ultrasonic Sensor

S.C.M:Standard Cappacitor Microphone

Amp. :Amplifier

Input voltage: $10V_{rms}$

F.C. :Frequency Counter