

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 : GU14A02L01-A02

描述
DESCRIPTION : $\phi 22 \times H18\text{mm}$ 40KHz 250~400mV 角度 110+/-15% 2.0nF 带线

客戶料號
CUSTOMER NO. :

規格書號
SPECIFICATION NO. :

版本
EDITION NO. : V1.1

日期
DATE : 2019-7-18

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	李林	

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

A. Scope

This specification applies Ultrasonic sensor **GU14A02L01-A02**

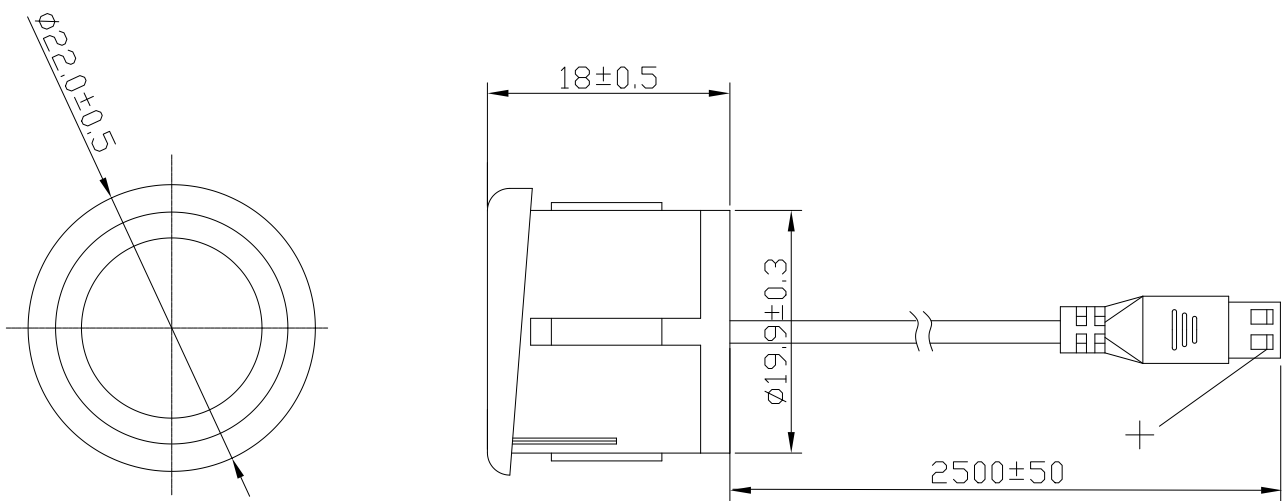
B. Characteristics

- 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

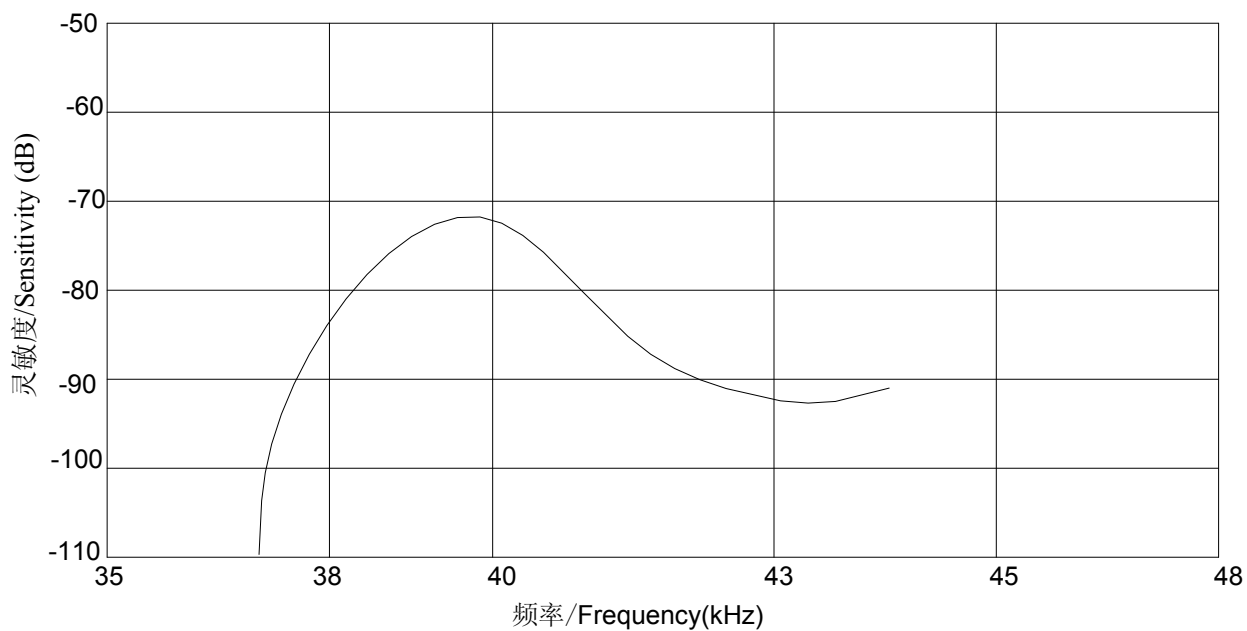
C. Technical terms

1	Center frequency(KHz)	$40\pm 1.0\text{KHz}$
2	Echo Sensitivity	$\geq 200\text{mV}$
3	Decay Time	$\leq 1.2\text{ms}$
4	Directivity (deg) X-axis	110 ± 15
5	Directivity (deg) Y-axis	70 ± 15
6	Capacitance (pF)	$2000\pm 15\%$
7	Allowable Maximum Input Voltage(Vp-p)	140(40KHz) Pulse width 0.5ms, interval 20ms
8	Operating Temperature($^{\circ}\text{C}$)	$-40\sim +80$
9	Storage temperature($^{\circ}\text{C}$)	$-40\sim +85$

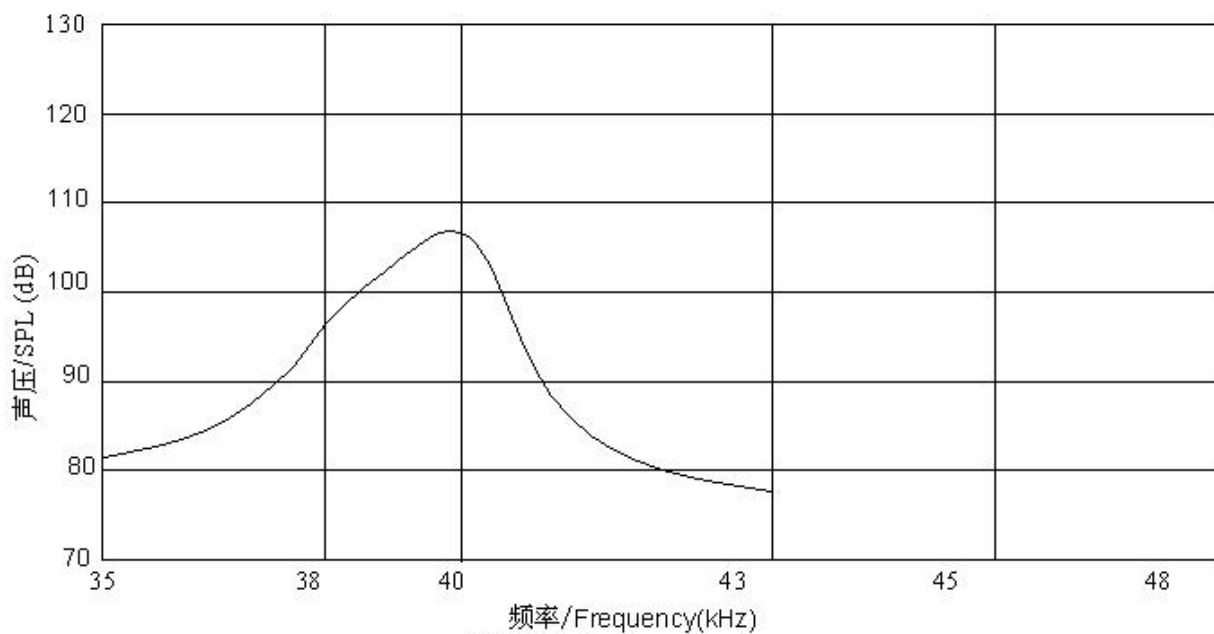
D .Drawing



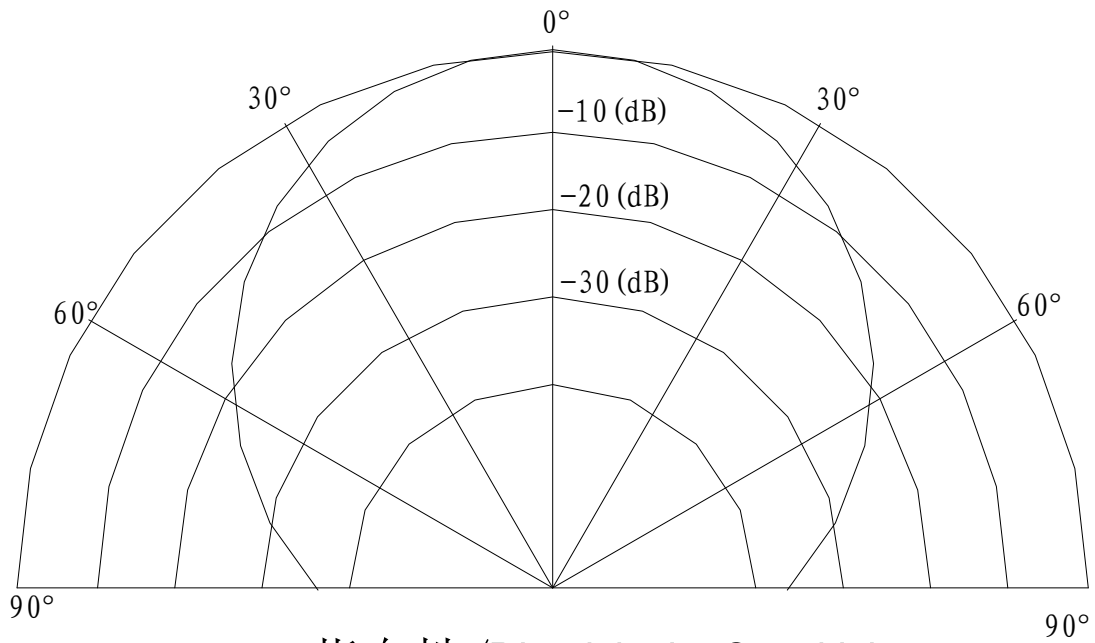
E. Beam Patten



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



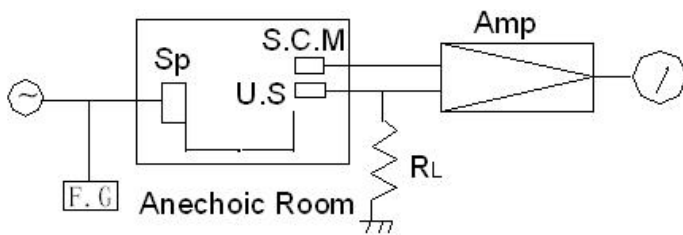
声压-频率特性图/SPL-Freq.Characteristics



指向性/Directivity in Sensitivity

F. Test Circuit

Receiver



RL: $3.9K\Omega$

U.S. :Ultrasonic Sensor

S.C.M:Standard Cappacitor Microphone

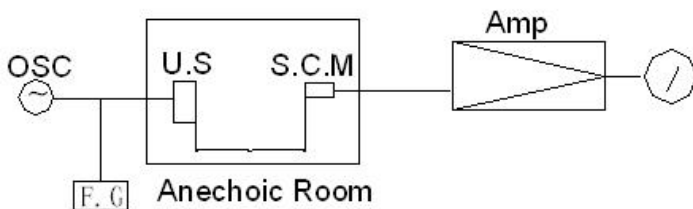
Amp. :Amplifier

OSC. :Oscillator

Sp :Tweeter

F.C. :Frequency Counter

Transmitter



U.S. :Ultrasonic Sensor

S.C.M:Standard Cappacitor Microphone

Amp. :Amplifier

Input voltage:10Vrms

F.C. :Frequency Counter