

# 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 : GU1610B-40TR

描述

DESCRIPTION :  $\phi 16 \times H10\text{mm}$   $40 \pm 1.0\text{KHz}$  角度  $80 \pm 15\%$  1800PF 插针 收发

客戶料號

CUSTOMER NO. :

規格書號

SPECIFICATION NO.:

版本

EDITION NO. : V1.0

日期

DATE : 2017-5-4

## 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	

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## A. Scope

This specification applies Ultrasonic sensor **GU1610B-40TR**

## B. Characteristics

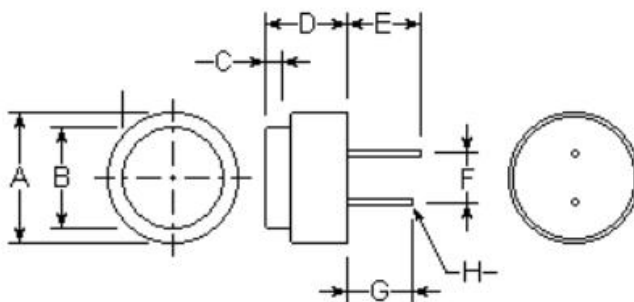
- 1.1) Open structure and separate use
- 1.2) Compact and light weight
- 1.3) High sensitivity and sound pressure
- 1.4) Less power consumption
- 1.5) High reliability



## C. Technical terms

1	Center frequency(KHz)	40±1.0 KHz
2	S. P. L	≥105 dB
3	Echo Sensitivity	≥250 mV
4	Decay Time	≤1.2 ms
5	Directivity (deg) X-axis	80±15
6	Directivity (deg) Y-axis	60±15
7	Capacitance (pF)	1800±20%
8	Allowable Maximum Input Voltage(Vp-p)	120(40KHz) Pulse width 0.5ms, interval 20ms
9	Operating Temperature(°C)	-40~+80
10	Storage temperature(°C)	-40~+85

## D. Drawing



$$A = \varnothing 16.0 \pm 0.5$$

$$B = 12.5 \pm 0.5$$

$$C = 3.0 \pm 0.5$$

$$D = 10.0 \pm 0.5$$

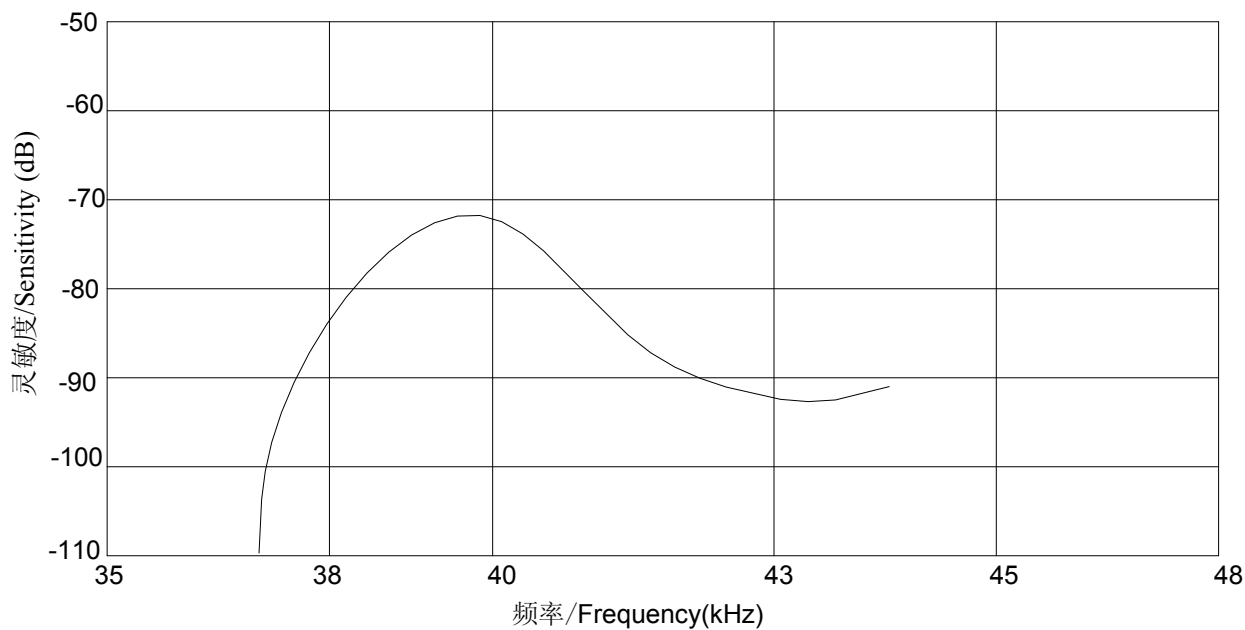
$$E = 9.0 \pm 0.5$$

$$F = 5.0 \pm 0.5$$

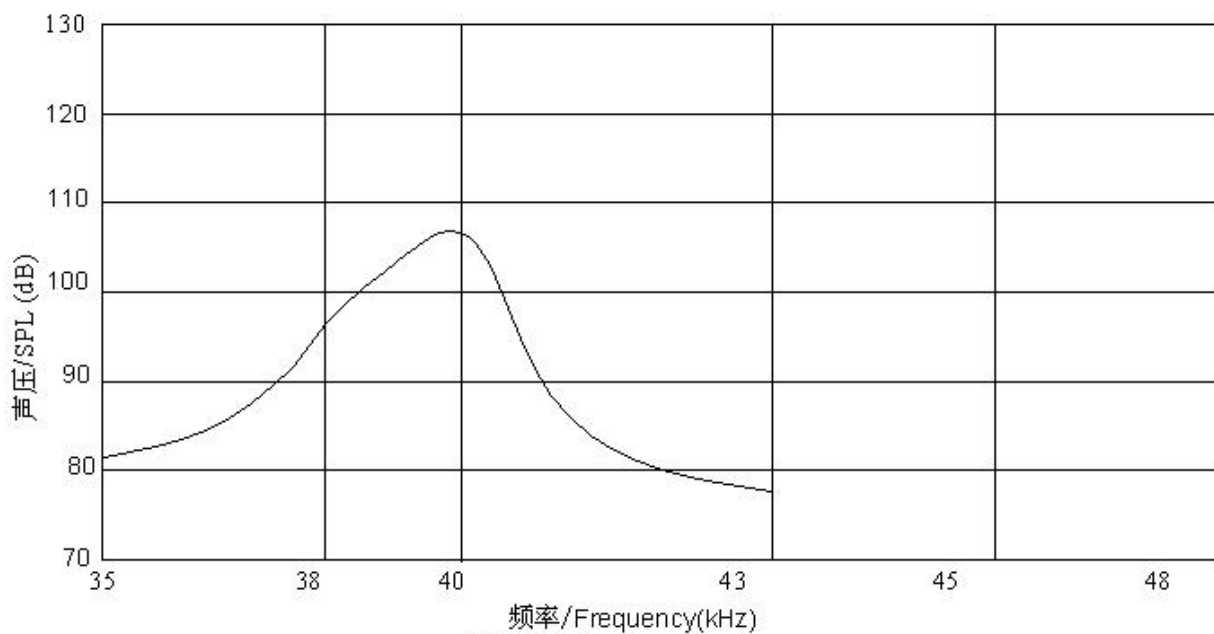
$$G = 7.0 \pm 0.5$$

$$H = \varnothing 0.6 \pm 0.1$$

## 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

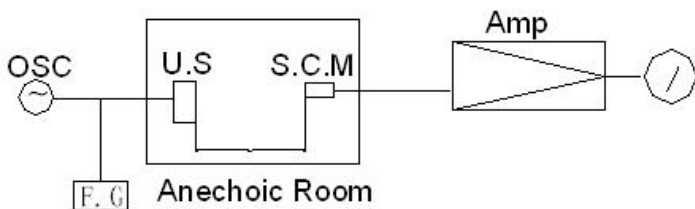
### F. Test Circuit

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