# 規格承認書

### PECIFICATION FOR APPROVAL

客 戶

**CUSTOMER** : 通用型规格书 电压范围 3-24V

項目

ITEM: 压电有源蜂鸣器(内含驱动电路)

型號

TYPE : GPD380X-3-24V2900

描述

DESCRIPTION: Ф43.0 x H33.0 mm 2900Hz DC3-24V ≥90dB ABS 材质 P=33mm

客戶料號

CUSTOMER NO. :

規格書號

SPECIFICATION NO.:\_\_\_\_

版本

EDITION NO. : V1.1

日 期

DATE : 20

# 客戶承認

### **CUSTOMER CONFIRM AND SIGN**

檢查	審核	承認
TESTED BY	CHECKED BY	APPROVED BY

# 東莞市贏海電子有限公司

# DONGUAN INGHAI ELECTRONICS CO.,LTD

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

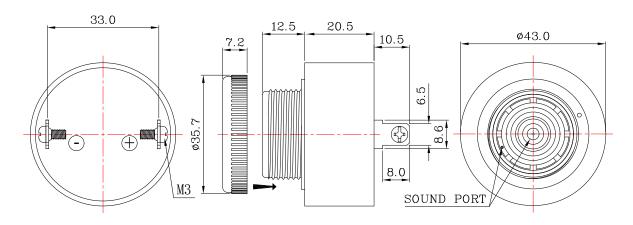
地址: 廣東省東莞市虎门镇怀德社区雅瑶工业区

網址: HTTP://WWW.INGHAI.COM

# DONGGUAN INGHAI ELECTRONICS CO.,LTD

Model NO: GPD380X-3-24V2900

**A: DIMEMSIONS** Unit: mm Tolerance:  $\pm 0.5$ 



### **B: SPECIFICATIONS**

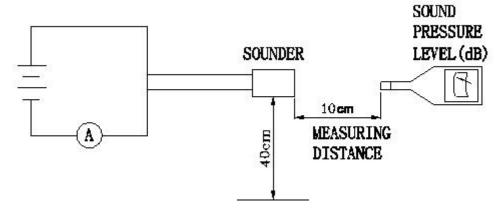
No.	Item	Unit	Specification	Condition
1	Oscillation Frequency	KHz	2.9±0.5	
2	Operating Voltage	VDC	4 ~28	
3	Rated Voltage	VDC	4 ~28	
4	Current Consumption	mA	MAX. 25	at Rated Voltage
5	Sound Pressure Level	dB	MIN. 90	at 30cm at Rated Voltage
6	Tone		Constant	
7	Operating Temperature	$^{\circ}\!\mathbb{C}$	-20~ +60	
8	Storage Temperature	$^{\circ}\!\mathbb{C}$	-30 ~ +70	
9	Dimension	mm	Ф43 х Н33	See appearance drawing
10	Weight (MAX)	gram	38.5	
11	Housing Material		ABS( Black )	
12	Leading Pin		Plating (Ni)	See appearance drawing
13	Environmental Protection Regulation		RoHS	

### **Measuring condition**

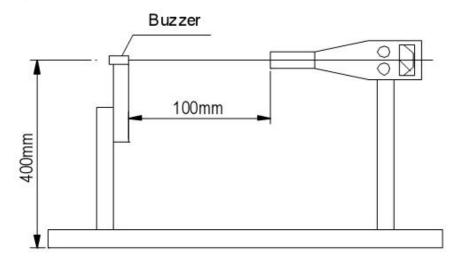
Part shall be measured under a condition (Temperature:  $5 \sim 35 \,^{\circ}\text{C}$ , Humidity:  $45\% \sim 85\%$ R.H., Atmospheric pressure:  $860 \sim 1060$ hPa) unless the standard condition (Temperature:  $25\pm 3\,^{\circ}\text{C}$ , Humidity:  $60\pm 10\%$ R.H. Atmospheric pressure:  $860 \sim 1060$ hPa) is regulated to measure.

# **C: Acoustic Characteristics:**

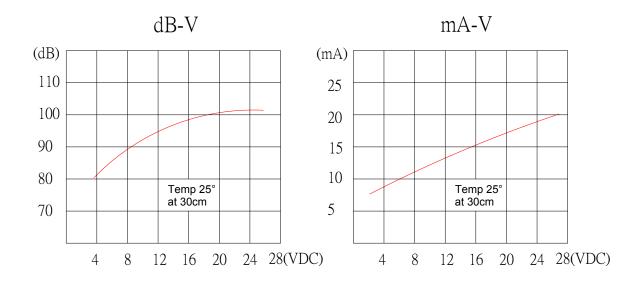
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below



In the measuring test, buzzer is placed as follows:



# **D: Typical Frequency Response Curve:**



# E: Reliability Test

After any following tests the part shall meet specifications without any degradation in appearance and performance except SPL. SPL shall not deviate more than -10 dB from the initial value

### 1. Ordinary Temperature Life Test

The part shall be subjected to 96 hours at  $25\pm10\,^{\circ}$ C. Input rated voltage Resonant frequency, 1/2 duty Square wave.

### 2. High Temperature Test

The part shall be capable of with standing a storage temperature of +70 ℃ for 96 hours.

#### 3. Low Temperature Test

The part shall be capable of with standing a storage temperature of -30℃ for 96 hours.

### 4. Humidity Test

Temperature:+40  $^{\circ}$ C  $\pm$ 3  $^{\circ}$ C Relative Humidity:90% $\sim$ 95% Duration: 48 hours and expose to room temperature for 6 hours

#### 5. Temperature Shock Test

Temperature: $60^{\circ}$ C /1hour  $\rightarrow$  25  $^{\circ}$ C/3hours  $\rightarrow$  -30  $^{\circ}$ C/1hour  $\rightarrow$  25  $^{\circ}$ C/3hours (1cycle) Total cycle: 10 cycles

### 6. Drop Test

Standard Packaging From 120mm(Drop on hard wood or board of 5cm thick, three sides, six plain.)

#### 7. Vibration Test

Vibration: 1000cycles /min. Amplitude: 1.5mm, Duration: 1 hour in each 3 axes

### Note:

As this product is not protected from foreign material entering, please make sure that any foreign materials (e.g. magnetic powder, washing solvent, flux, corrosive gas) do not enter this product in your production processes. The functional degradation (e.g. SPL down) may occur if foreign material enter it.