



深圳市兴华鑫电子科技有限公司

Shenzhen xinghuaxin Electronic Technology Co., Ltd

# 承認書

## SPECIFICATION FOR APPROVAL

客戶 (Customer): \_\_\_\_\_

客戶料號 (Customer P/N): \_\_\_\_\_

興華鑫型號 (Supplier P/N): 4015P-2.8MM

產品名稱 (Description): 咪头 (Microphone)

產品規格 (Specification): 4.0\*1.5MM 2.8 針

客戶承認欄 (Customer Authorization Signature)	深圳市興華鑫電子科技有限公司 承認欄 (Supplier Audit)		
	審核	檢查	制作
	唐国兴	唐玉来	吴银娟
	日期: 2022 年 04 月 19 日 版次: A		

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## 产品规格内容

### 1. SCOPE

This specification covers electrical and mechanical requirements for the microphone XHXDZ-4015 带针

### 2. ABSOLUTE RATINGS

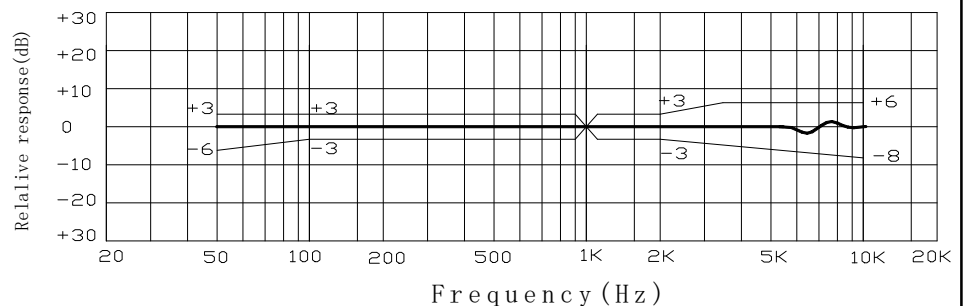
Storage Temperature Range	-40~+70℃
Operating Voltage	1.0~10V

### 3. ELECTRO-ACOUSTICAL CHARACTERISTICS (Specified for XHXDZ-4015 带针 only)

Test condition( $V_s=2.0V$ ,  $R=2.2k\Omega$ ,  $T_a=20^\circ C$ ,  $RH=65\%$ )

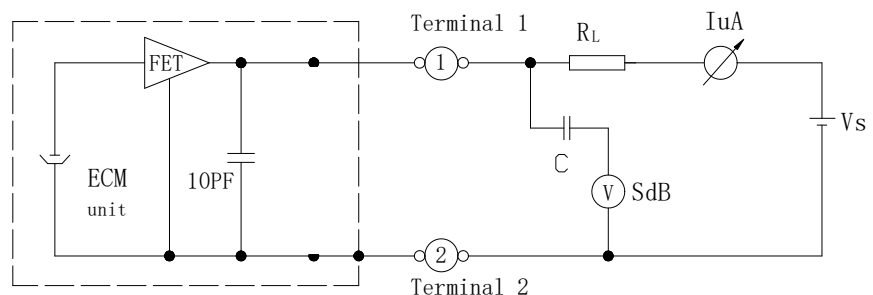
Items	Test conditions	Minimum	Nominal	Maximum	Unit
Directivity	Omni-directional				
Sensitivity	Input Signal : $f=1kHz$ S.P.L=1Pa 0dB=1V/Pa	-39	-36	-33	dB
S/N Ratio		58			dB (A)
Output Impedance				2.2	k $\Omega$
Current Consumption				500	$\mu A$
Decreasing Bias Characteristics	Bias Voltage 2V→1.5V			-5	dB

Typical Frequency Response  
(QSY4015PBC-42P2.8)



Measurement Circuit

$V_s$ : Source Voltage 2.0V  
 $R$ : Load Resistance 2.2k $\Omega$   
 $C$ : Condenser 1  $\mu F$   
 $T_a$ : Temperature  
 $RH$ : Relative Humidity



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### 4. MECHANICAL CHARACTERISTICS

Dimensions	See Appearance Drawing
Weight	Less than 1.0 g
Terminal Mechanical Strength	To be no interference in operation after pulled terminal with 0.5kg strength for 1 minute. (PIN and SOLDERING type only)

### 5. RELIABILITY TESTS

Items	Test Conditions	Evaluation Standards
High Temperature Test	+80℃ for 200 hours	Sensitivity Change within $\pm 3\text{dB}$ relative to initial value *
Low Temperature Test	-40℃ for 200 hours	Sensitivity Change within $\pm 3\text{dB}$ relative to initial value *
Temperature Cycle Test	Temperature cycle of -40℃/45 minutes , +70℃ /45 minutes, 5 cycles duration	Sensitivity Change within $\pm 3\text{dB}$ relative to initial value *
Humidity Test	+65℃ and 90~95% for 200 hours	Sensitivity Change within $\pm 3\text{dB}$ relative to initial value *
* Sensitivity measurement is to be done 12 hours after each test		

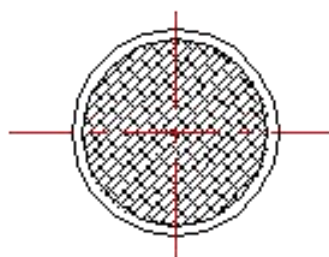
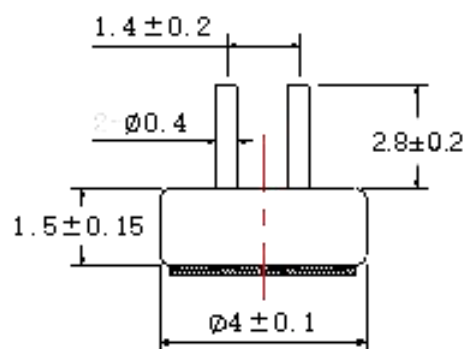
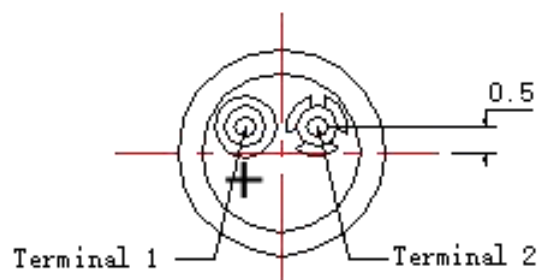
### 6. MECHANICAL TESTS

Items	Test Conditions	Evaluation Standards
Vibration Test	Vibration cycle of 10 to 50 Hz/1min, for 2 hours, full Amplitude 1.52mm, in 3 directions	Sensitivity Change within $\pm 3\text{dB}$ relative to initial value
Drop Test For packing	Dropping to concrete floor from 1 m height, Directions: 1 corner, 3 edges, 6 planes	Sensitivity Change within $\pm 3\text{dB}$ relative to initial value

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## 产品规格内容

### 7. APPEARANCE & DIMENSIONS



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## 产品规格内容

### 8. HANDLING INSTRUCTION

#### 1. Assembly process

- a) After connector and holder are once disassembled, they should not be re-used;
- b) Do not touch outer springs directly (except for PCB or proper terminal set at nominal height)
- c) Do not give any mechanical shocks to the microphone (e.g. dropping to floor);

#### 2. General information

2-1 This microphone shall not be operated or stored in following environment.

- > Where liquid (water, solvent and so on) splashes.
- > Where the air has a high concentration of corrosive gas.
- > Where is too dusty.
- > Where temperature changes rapidly.

2-2 Frequency response especially in high frequency region is dependent on the structure of enclosure

Please remove additional acoustic mass or cavity in front of the microphone to the utmost.

2-3 Do not put mechanical pressure more than 2kg to the microphone.

2-4 Microphones should be in state of outgoing packaging for a long-term storage.