XINHOUTAI
深圳市新厚泰电子科技有限公司

APPROVAL SHEET

CUSTOMER：高端		
		No：**YP18022603**
PRODUCT NAME	PART NUMBER	DIMENSION
Electret Condenser Microphone	HCM9765-P11-453	Φ9.7×6.5mm
XHT APPROVAL		
APPROVED BY	CHECKED BY	ISSUED BY
CUSTOMER APPROVAL		
ENGINEERING	QUALITY	PURCHASE
APPROVED BY DATE:		

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Customer P/N	1065-230-10017-009	Customer Code Name	XHT-
Manufacturer	新厚泰 XHT	Part Number	HCM9765-P11-453
Spec	Φ9.7±0.2 x 6.5±0.15	Test Condition	2V 2.2KΩ
Sensitivity	-45±3dB (0dB=1V/Pa)	Pin (Wire) Length	P=11mm
Samples QTY	10 PCS	Fittings	

ELECTRICAL CHARACTERISTICS

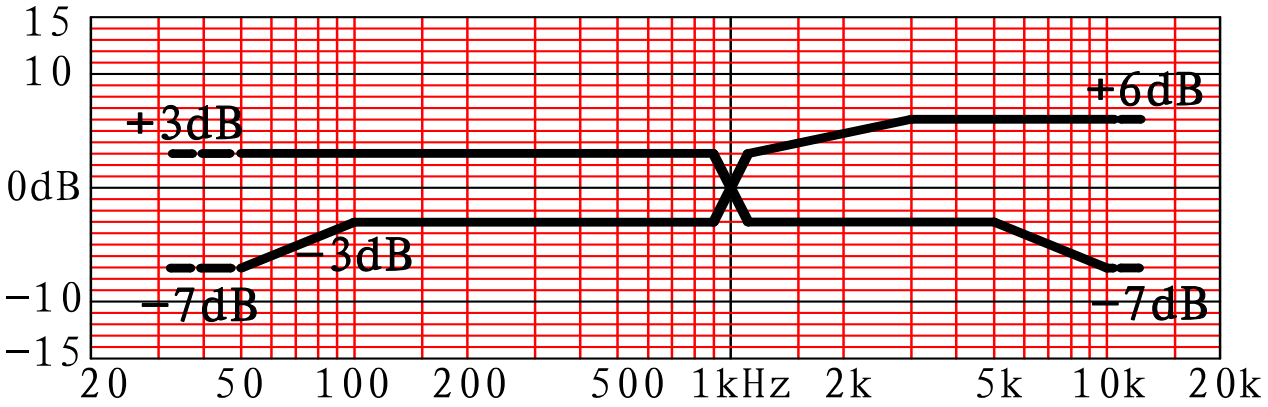
Parameter	Symbol	Condition	Min	Standard	MAX	Unit
Sensitivity	S	f=1KHz, S.P.L=1Pa. 0db=1v/ Pa	-48	-45	-42	dB
Directivity		Omnidirectional				
Operation Voltage Range			1		10	V
Current Consumption	I	Vcc=2V. RL=2.2KΩ			500	μA
Max.Sound Pressure Level					110	dB
S/N Ratio	S/N(A)	f=1KHz. S.P.L=1Pa	58			dB
Decreasing Voltage Characteristic	△S-VS	Vcc=2V→1.5V			-3	dB
Frequency			100		16000	Hz

Test Ambient	Temperature:23±2℃	Humidity:60～70%

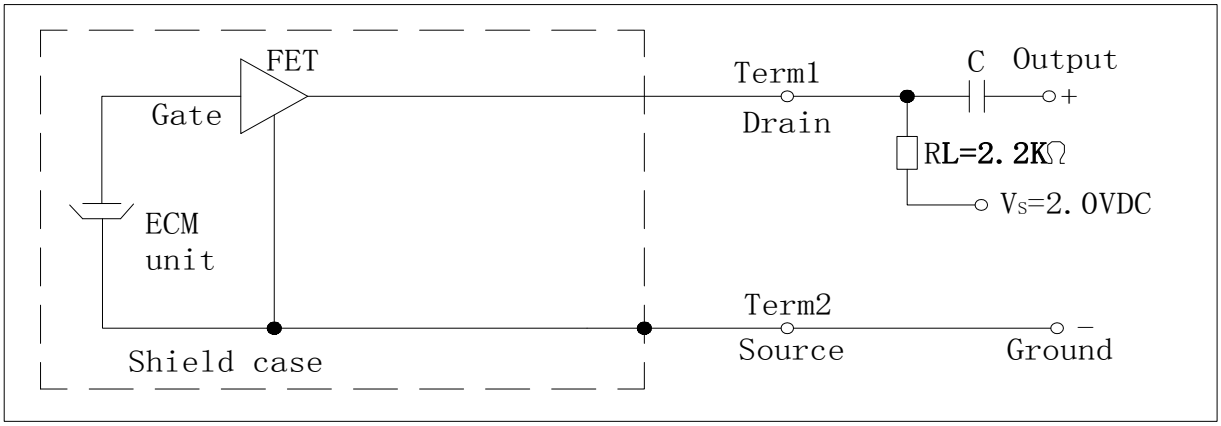
Measure Instrument: HY900-1	Test Result: 10 Pcs

ITEM / No	Sensitivity(-dB)	Idss(μA)	D (mm)	H(mm)	Pin(Wire)Length(mm)
1	43.3	220	6.01	5.02	11.0
2	44.1	230	6.03	5.03	11.2
3	44.4	220	6.00	5.00	11.0
4	43.6	220	6.02	5.01	11.1
5	46.4	240	6.03	5.00	11.3
6	46.1	220	6.03	5.03	11.0
7	45.9	210	6.00	5.00	11.2
8	43.5	240	6.02	5.01	11.1
9	44.0	240	6.03	5.00	11.0
10	46.4	200	6.02	5.01	11.0
MAX	43.3	240	6.03	5.03	11.3
MIN	46.4	210	6.00	5.00	11.0
AVG	44.77	224	6.02	5.01	11.1
Conclusion	OK	OK	OK	OK	OK

1、Typical Frequency Response Curve:

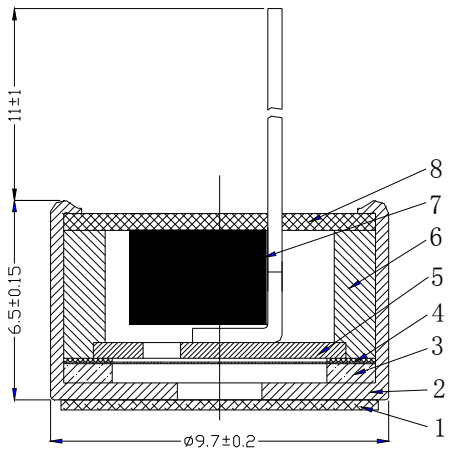


2、Schematic Diagram:



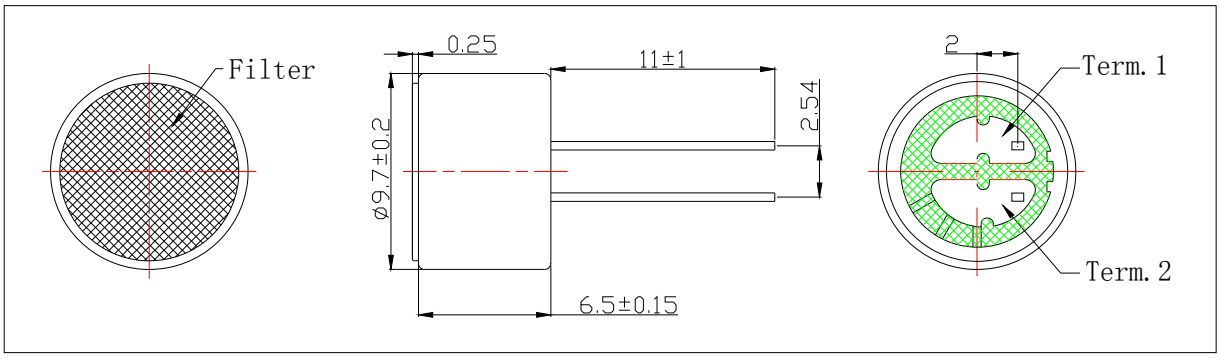
3、Mechanical Specifications

3、1 Drawing



NO.	NAME	MATERAL	QTY	Supplier
1	SCREEN	NON-FIBRECORD	1	LOCAL
2	CASE	AL	1	LOCAL
3	DIAPHRAGM	BRASS+FEP	1	LOCAL
4	SPACER	POLYESTER FILM	1	LOCAL
5	PLATE	BRASS	1	LOCAL
6	CHAMBER	POM	1	LOCAL
7	F.E.T		1	
8	P.C.B	BAKELITE EPOXY	1	LOCAL

3、2 Dimension(mm)



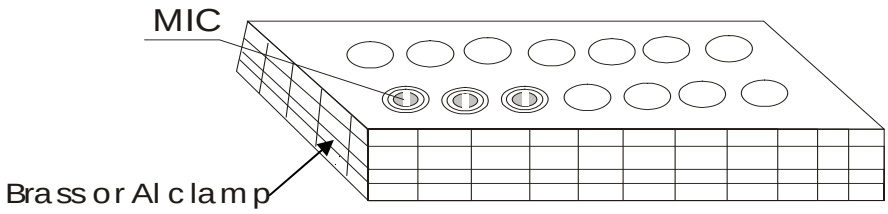
4、Reliability tests: After any following tests, the sensitivity of the microphone unit shall not change more than ±3dB from initial value, and shall keep their initial operation and appearance.

4.1	Hi -Temp. Test	The microphone unit be subjected to +80℃ for 96 Hours, and expose to room temperature for 6 Hours.
4.2	Low -Temp. Test	THE microphone unit be subjected to -25℃ for 96 Hours, and expose to room temperature for 6 Hours.
4.3	Temperature Cycle Test	-20℃ → 25℃ → 70℃ → -20℃ 2H 1H 2H 1H 2H 1H 2H x 10 Cycles
4.4	Humi. &Heat Test	The microphone unit must be subjected to +40℃, 93%RH for 96 Hours, and expose to room temperature for 6 Hours.
4.5	Vibration Test	The microphone unit must be subjected to a procedure that after vibrating for 2 hours from each of the two directions with a frequency of 10Hz to 55Hz and a 3mm high amplitude. The sensitivity to be within ±3dB from initial sensitivity.
4.6	Drop Test	To be no interference in operation after dropped to concrete floor each time from 1 meter height of three directions in state of packing, The sensitivity to be within ±3dB from initial sensitivity.

5、Environmental Condition:

5.1	Storage condition	-40℃～+70℃ R.H. less than 90%
5.2	Operation condition	-20℃～+60℃ R.H. less than 90%
5.3	Arbitration condition	Temperature:25℃±2℃ Relative humidity:60%～70% Air pressure:86～106Kpa

6、Notices:

6.1	All the soldering procedures upon microphones must be completed in a metallic device, the temperature of the soldering irons must be limited as 350℃±10℃, Soldering time should not exceed 2 seconds. 
6.2	Operators, the solder fixture and the soldering iron must be statically grounded under each soldering process.
6.3	Always Avoid bring pinholes on the soldering terminal during the operation to the omnidirectional microphones.

7、Packaging: