

**承 认 书**

**SPECIFICATION FOR APPROVAL**

客 户 Customer:

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产品名称 Project: MIC咪头4013 奔驰标一电一阻凸台

\_\_\_\_\_

规格型号 Part No:

MIC4013-X

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**贵公司承认印 Approval signatures**

料 号/Part No.	签 章/Signatures

日期 Date:

拟制/Drawn	王宗华	
审核/Check	陈森森	
批准/Approved	张春华	

## 一. SCOPE 适用范围

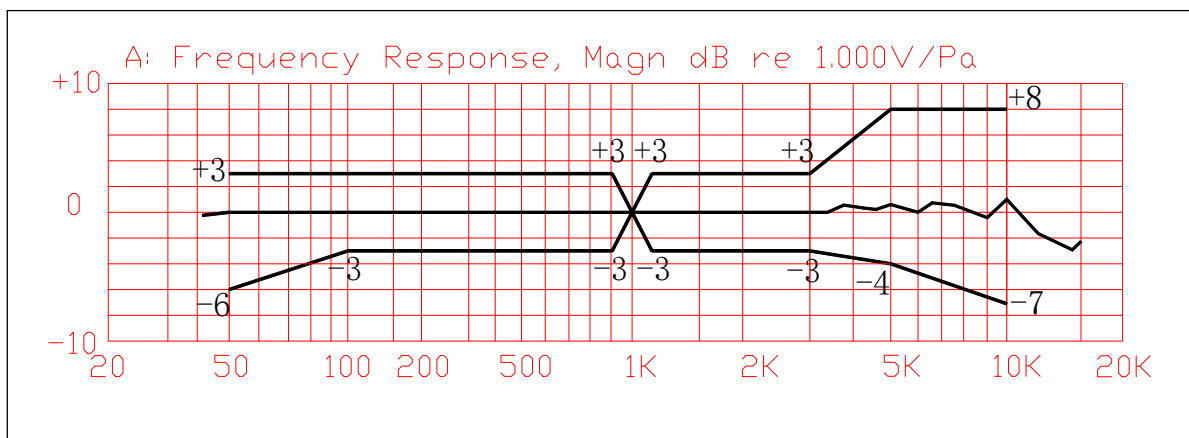
The specifications should be applied to electret condenser microphone of T401305-423S  
此规格书适用于 T401305-423S 型驻极体电容传声器

## 二. ELECTRICAL CHARACTERISTICS 电气特性

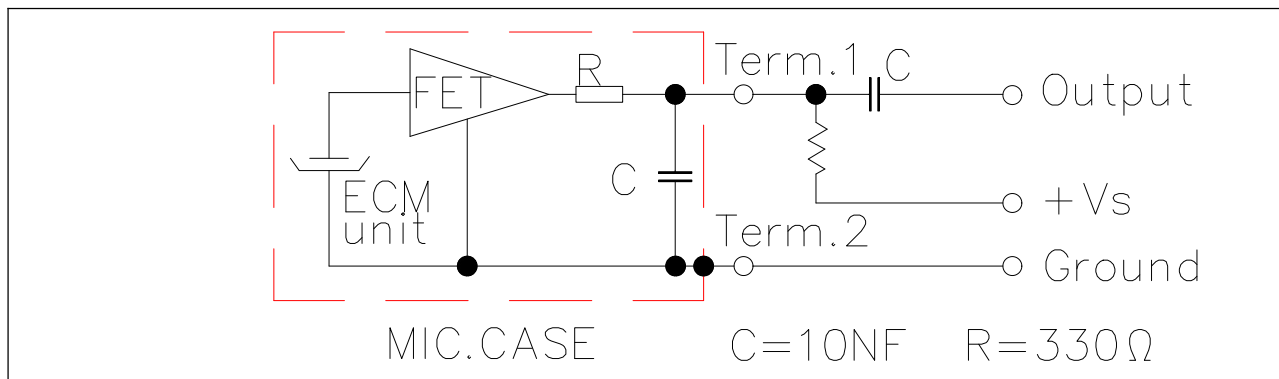
Temp. =  $20 \pm 2$  °C, Room Humidity  $60 \pm 5\%$ , Air pressure:  $86 \sim 106$  Kpa

NO	Parameter	Symbol	Condition	Limits			Unit
				Min	Center	Max	
1	Directivity 指向性	0	Omni directional 全指向				
2	Sensitivity 灵敏度	S	f=1KHZ, S. P. L=1Pa (0dB=1V/Pa)	-45	-42	-39	dB
3	Output impedance 负载电阻	Zout	f=1KHZ			2.2K	$\Omega$
4	Current Consumption 耗电流	IDss	VCC=2.0V, RL=2.2K $\Omega$			500	$\mu$ A
5	Operating Voltage 工作电压			1.0		10	V
6	Standard Operating Voltage 标准工作电压				2.0		V
7	Decreasing Voltage 减电压灵敏度	$\Delta S-VS$	VS=2.0V to 1.5V			-3	dB
8	Signal to Noise Ratio 信噪比	S/N	f=1KHz, S. P. L=1Pa (A-Weighted curve)	58			dB
9	Max Input S. P. L 最大输入音压		THD < 3% (f=1KHZ)			110	dB

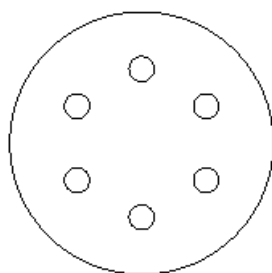
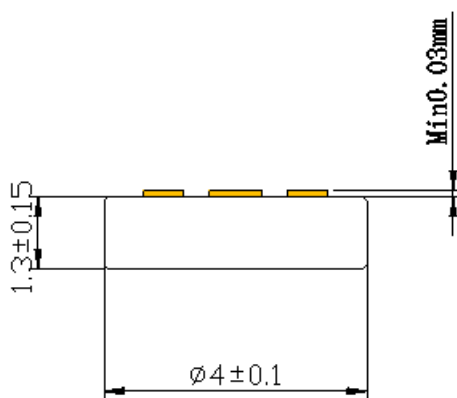
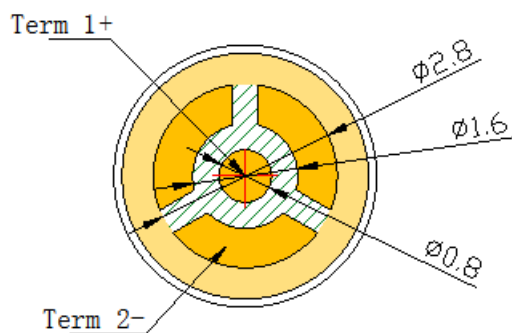
## 三. TYPICAL FREQUENCY RESPONSE CURVE 频率响应曲线



## 四. MEASUREMENT CIRCUIT 测量线路



## 五. APPEARANCE & DIMENSIONS DRAWING 外观尺寸图



Unit: mm

TOL: ±0.2

**六、RSLIABILITY TEST 性耐性试验**

High Temperature Test 高温试验	After exposure at 80°C for 96 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. 在 80°C 环境中 96 小时后, 灵敏度应在初始灵敏度的 $\pm 3\text{db}$ 范围内
Humidity Test 湿度试验	After exposure at 40°C and 93% relative humidity for 96hours 在 40°C 和 93% 相对湿度下 96 小时后, 灵敏度应在初始灵敏度的 $\pm 3\text{db}$ 范围内
Low Temperature Test 低温试验	After exposure at -25°C for 96 hours, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. 在 -25°C 环境中 96 小时后, 灵敏度应在初始灵敏度的 $\pm 3\text{db}$ 范围内。
Drop Test 跌落试验	To be no interference in operation after dropped to concrete floor each one time from 1 meter height at three directions in state of standard packing. 每次跌落到混凝土地面后, 无干扰操作。在标准包装状态下, 三个方向的高度为 1 米。
Vibration Test 振动试验	To be no interference in operation after vibration. 10Hz to 55Hz for 1 minute full amplitude 1.52mm, for 2 hours at three axes in state of Standard packing. 振动后运行无干扰。10Hz 至 55Hz, 1 分钟全振幅 1.52mm, 在标准包装状态下在三个轴上放置 2 小时。
Temperature Cycle Test 温度循环试验	After exposure at -25°C for 30 minutes, at 20°C for 10 minutes, at 70°C for 30 minutes, at 20°C for 10 minutes. 5 cycles, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity. 在 -25°C 环境 30 分钟后, 在 20°C 环境 10 分钟后, 在 70°C 环境 30 分钟后, 在 20°C 下保持 10 分钟。5 个周期, 灵敏度在初始灵敏度的 $\pm 3\text{db}$ 范围内。
Temperature Shock Test 温度冲击试验	Temperature change from -25°C to 70°C for 30 minutes . (changing time : 20 sec. )After 5 cycles, sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity 温度从 -25°C 到 70°C 变化 30 分钟。(改变时间: 20 秒) 5 个周期后, 灵敏度在初始灵敏度的 $\pm 3\text{db}$ 范围内。

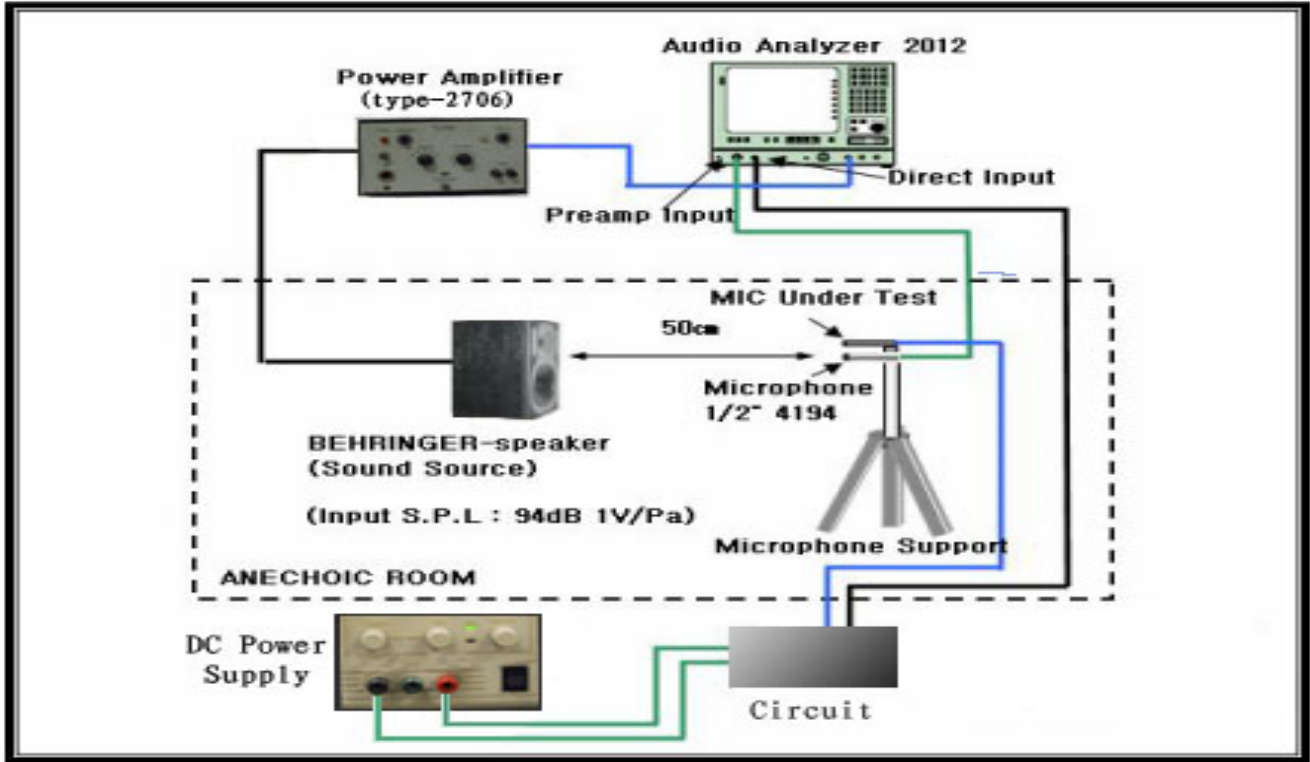
All tests should be done after 3 hours of conditioning at 20°C, R. H60%, while the sensitivity is to be within  $\pm 3\text{dB}$  from the initial sensitivity after the following experiments.)

在下列试验完成后, 在温度为 20°C, 相对湿度为 60% 的条件下恢复 3 小时后进行测试, 灵敏度与初始灵敏度相差在  $\pm 3\text{dB}$  以内。

Storage Temperature 储存温度 -40°C ~ 70°C With 0% ~ 90% R. H. humidity  
Operating Temperature 操作温度 -20°C ~ 60°C With 0% ~ 90% R. H. humidity

## 七. MEASUREMENT SYSTEM 测量系统

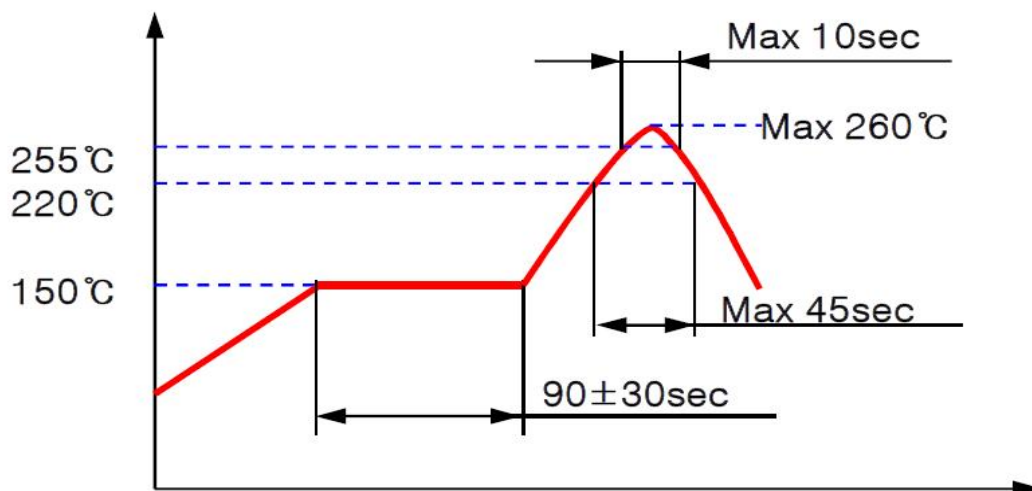
Far field measurement system



## 八. Soldering Condition 焊接条件

Guaranteed Maximum Reflow Condition 极限回流条件

Ambient temperature

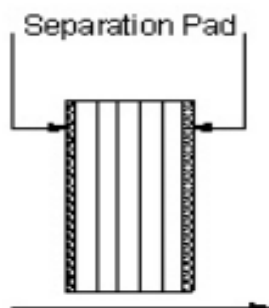


NOTE : After the first reflow, the second reflow is tested on keeping MIC the usual temperature. 第一次回流焊后, 待产品温度恢复常温再进行第二次回流焊.

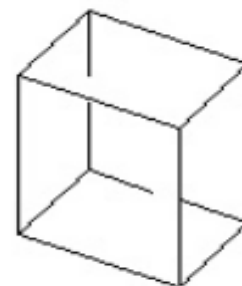
## 九.Package 包装



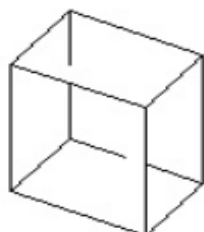
Packing (5000PCS)



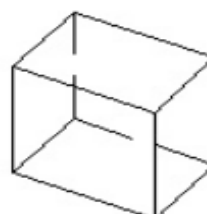
5 pcs reels



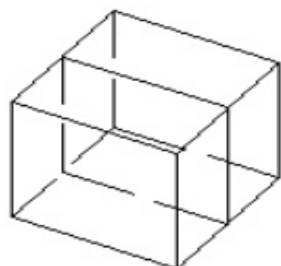
Plastic Bag (25000PCS)  
(336mm\*115mm\*450mm)



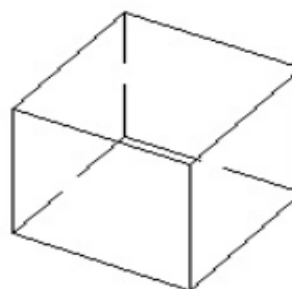
Plastic Bag (25000PCS)  
(336mm\*115mm\*450mm)



Inner Box (25000PCS)  
(340mm\*135mm\*355mm)



Two Inner Box(50000PCS)



Outer Box(50000PCS)  
(370mm\*300mm\*390mm)