

SPECIFICATION

受 控

Customer : QUARTZ-1

Applied To :

Product Name : MIC

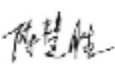
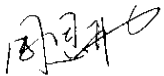
Model Name : KPCM-G40H15PC43-40DB-1104

Drawing No. : KIC1104

Signature of Appronal

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Signature of KEPO

Approved by	Checkde by	Issued by	Date
			2010.02.27



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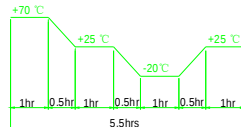
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		Revision No.	1.0
Model No. : KPCM-G40H15PC43-40DB-1104		Drawing No.	KIC1104
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1. Scope 范围 This specification applies electret condenser microphone. 此规格书适用于电容式麦克风. 2. General 概要 2.1 Out-Diameter : 4 mm 2.1. 外径 : 4 mm 2.2 Height : 1.5 mm 2.2. 高度 : 1.5 mm 2.3 Weight : ≤0.3 g 2.3 重量 : ≤0.3 g 2.4 Operating Temperature range: '-20~+70℃ without loss of function 2.4 工作温度: -20~+70℃ 2.5 Store Temperature range: '-20~+70℃ without loss of function 2.5 储存温度: -20~+70℃ 3. Electrical and Acoustic Characteristics. 电声参数 Test condition : 15 ~ 35 ℃, 45% ~ 85% RH, 860~1060 mbar 测试条件 : 15~35 ℃, 45%~85%RH , 860 ~ 1060mbar <table> <tr> <th>No</th><th>Items</th><th>Symbol</th><th>Unit</th><th>Specification</th><th>Condition</th></tr> <tr> <td>1</td><td>Directivity 指向性</td><td></td><td></td><td>Omni-directional 全指向性</td><td></td></tr> <tr> <td>2</td><td>Sensitivity 灵敏度</td><td>S</td><td>dB</td><td>-40dB±2</td><td>0dB=1V/pa,1KHz</td></tr> <tr> <td>3</td><td>Standard Operation Voltage 标准操作电压</td><td>Vs</td><td>V.D.C</td><td>2.0</td><td></td></tr> <tr> <td>4</td><td>Output impedance 输出阻抗</td><td>Zout</td><td>KΩ</td><td>2.2</td><td>f=1KHz,1pa</td></tr> <tr> <td>5</td><td>Max operating voltage 最大操作电压</td><td></td><td>V.D.C</td><td>10</td><td></td></tr> <tr> <td>6</td><td>Sensitivity reduction 减压灵敏度</td><td>△S-Vs</td><td>dB</td><td>-3</td><td>f=1KHz,1pa Vs=3.0-1.5V.D.C</td></tr> <tr> <td>7</td><td>Frequency 频率</td><td>f</td><td>Hz</td><td>100-10,000</td><td></td></tr> <tr> <td>8</td><td>Max. Current Consumption 最大耗电流</td><td>IDss</td><td>mA</td><td>0.5</td><td>Vs=2.0V,RL=2.2KΩ</td></tr> <tr> <td>9</td><td>Signal to noise ration 讯号对比杂音</td><td>S/N</td><td>dBA</td><td>60</td><td>f=1KHz,1pa A weighted</td></tr> <tr> <td>10</td><td>Material 材质</td><td></td><td></td><td>AL 铝</td><td></td></tr> <tr> <td>11</td><td>Terminal 端子</td><td></td><td></td><td></td><td>See appearance drawing 请参照外观尺寸图</td></tr> <tr> <td>12</td><td>Environmental Protection Regulations 环保法规</td><td></td><td></td><td>RoHS</td><td></td></tr> </table> We use "Pascal (Pa)" indication of sensitivity as per the recommendation of I.E.C (International Electro technical Commission). The Sensitivity of "Pa" will increase 20dB comparing with "ubar" indication. Example : -60dB(0dB=1v/ubar)=-40dB(1v/Pa) 依I.E.C.(国际电子协会) 建议, 以"Pa"为灵敏度标示单位比"ubar"灵敏度标示单位增加20dB 例如:-60dB(0dB=1V/ubar)=-40dB(1V/Pa)						No	Items	Symbol	Unit	Specification	Condition	1	Directivity 指向性			Omni-directional 全指向性		2	Sensitivity 灵敏度	S	dB	-40dB±2	0dB=1V/pa,1KHz	3	Standard Operation Voltage 标准操作电压	Vs	V.D.C	2.0		4	Output impedance 输出阻抗	Zout	KΩ	2.2	f=1KHz,1pa	5	Max operating voltage 最大操作电压		V.D.C	10		6	Sensitivity reduction 减压灵敏度	△S-Vs	dB	-3	f=1KHz,1pa Vs=3.0-1.5V.D.C	7	Frequency 频率	f	Hz	100-10,000		8	Max. Current Consumption 最大耗电流	IDss	mA	0.5	Vs=2.0V,RL=2.2KΩ	9	Signal to noise ration 讯号对比杂音	S/N	dBA	60	f=1KHz,1pa A weighted	10	Material 材质			AL 铝		11	Terminal 端子				See appearance drawing 请参照外观尺寸图	12	Environmental Protection Regulations 环保法规			RoHS	
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4.1 Mechanical Characteristics 机械特性			
No.	Item	Test Condition	Evaluation standard
1	Solderability 焊锡附着性 (Connector excepted) 端子类不适合此项	Strippd wires of lead wires are immersed in rosin for 5 seconds and then immersed in solder both of +270±5℃ for 3±0.5 seconds. 裸线部分侵入松香溶液5秒后, 再侵入+270±5℃ 熔融焊锡槽3±0.5	90% minstripped wires shall be wet with solder .(Exceptet the edge of terminal). 侵入裸线部分附着焊锡90%以上。(末端断面不算)
2	Lead Wire Pull Stength 线材拉力	The pull force shall be applied to double lead wire:Horizontal 4.9N (0.5kg) for 30 seconds. 双线材水平方向施以4.9N (0.5kg)的力量30秒。	No damage and cutting off. 线材不松动, 不脱落
3	Vibration 振动试验	Sounder shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55Hz band of vibration frequency to each of 3 perpendicular directions for2 hour. 振幅为1.5mm, 频率为10-50Hz, 三个不同轴方向各振动2小时, 试验后进行测量。	After any tests,the sensitivity to be within ±3dB 测试其灵敏度须与原测试值的差异不超过±3dB
4	Drop test 跌落试验	The microphone uint without packaged mst be subjected to each 3 drops a three axiss from the heigh of 1 meter to 20mm thick wodden board. 未包装麦克风单体从1公尺高处, X.Y.X 3个方向, 各3回, 落于20mm厚木板上。	
4.2 Environmental test 环境试验			
No.	Item	Test Condition	Evaluation standard
1	High temperature test 高温测试	After being placed in a chamber at +70 ℃ for 72 hours. 置于+70 ℃ 环境中72小时。	After any tests,the sensitivity to be within ±3dB of initial sensitivity after6 hours of conditioning at +25℃ 经测试后麦克风, 须静置于 +25℃ (室温) 环境中6小时后, 测试其灵敏度须与原测试值的差异不超过±3dB
2	Low temperature test 低温试验	After being placed in a chamber at -20℃ for 72 hours. 置于-20 ℃环境中72小时。	
3	Humidity Test 相对湿度试验	After being placed in a chamber at +40℃ and 90±5% relative humidity for 240 hours. 置于+40℃ , 相对湿度90±5%环境中240小时。	
4	Temperature cycle test 温度循环测试	The part shall be subjected to 10 cycles.One cycle shall be consist of : 单 体承受温度循环测试10次, 其循环内容如图示 	

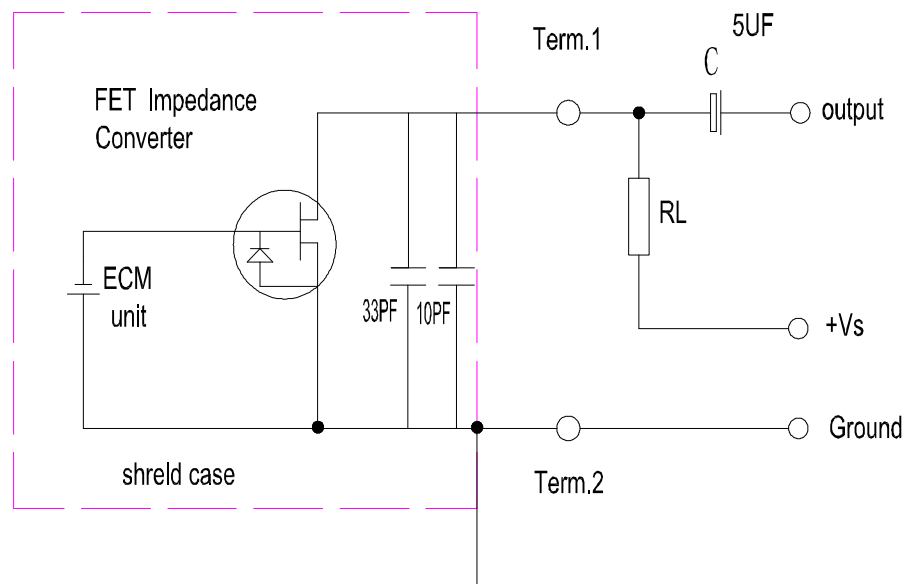
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5. Measurement Block Diagram & Response curve

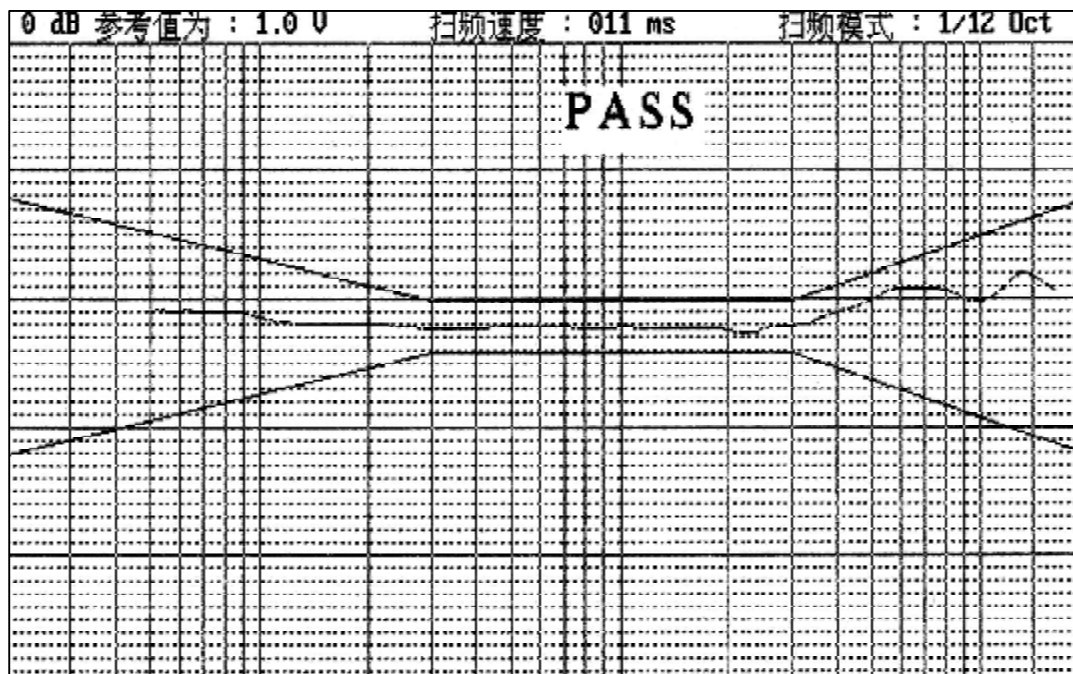
测试图和曲线图

5.1 Measurement Block Diagram 测试图

Schematic Diagram $V_s = 2.0V$; $R_1 = 2.2K\Omega$



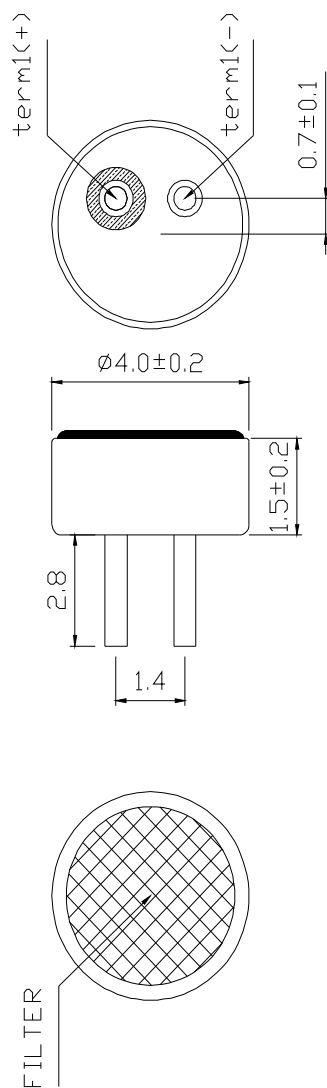
5.2 Response curve 曲线图



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6. Dimensions 尺寸图



FIRST ANGLE PROJECTION



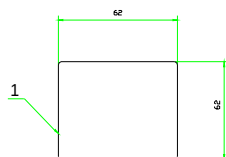
UNIT : mm

Tolerance : ± 0.2

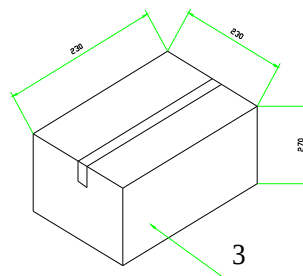
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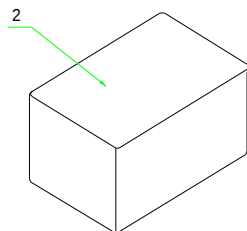
7. Packing 包装



小包装
Inner Box
62X62X6
100Pcs



外包装
Outer Box
230X230X270
30000PCS



中包装
Middle Box
126×66×43
1000PCS

