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1. Scope

This specification is applied to the MIC which is used all of the electrical acoustic product.

-- applications: mobile phone, PDA, notebook computer, etc. ..

2. General

2.1 Out-Diameter : Ø9.7mm 2.2 Height : 4.5mm

2.3 Weight : 1g.

2.4 Operating Temperature range:

-10~+60°C without loss of function

2.5 Store Temperature range:

-40~+70°C without loss of function

3. Electrical Characteristics.

Test condition : $5 \sim 35$ °C, $45\% \sim 85\%$ RH, $860\sim1060$ mbar

NO.	Items	Specifications
1	Impedance	1.5K Ω ± 30% at 1KHz
2	Operating Voltage	Min.1V Standard 1.5V Max. 10V
3	Sensitivity	-44± 3dB at 1KHz(0dB=1V/Pa)
4	Current Consumption	less than 500 μA
5	Input Sound Level	Max 110dB S.P.L
6	S/N Ratio	≥58dB at 1KHZ
7	Sensitivity Reduction	less than - 3dB(VTerminal1 varies 1.5V→1.1V)
8	Directivity	Omnidirectional
9	Testing Condition	1000Hz, Vs=1.5V, RL=1.5K Ω
10	Shell Material/Color	AL/Silver
Note:		

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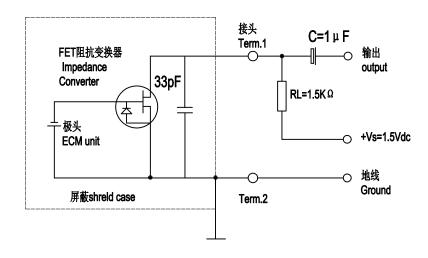
4. Reliability Test

After test(1~7item), the MIC sensitivity to be within +/-3dB from initial sensitivity.

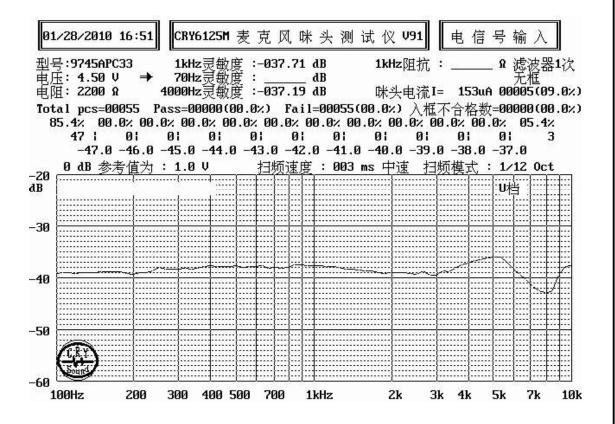
	Item	Specification	
1	High Temperature Test	After exposure at $+70^{\circ}$ C for 200 hours, sensitivity to be within \pm 3dB from initial sensitivity. (The measurement to be done after 2 hours of conditioning at 20° C).	
2	Low Temperature Test	After exposure at -25° C for 200 hours, sensitivity to be within \pm 3dB from initial sensitivity. (The measurement to be done after 2 hours of conditioning at 20° C).	
3	Humidity Test	After exposure at +40° C and 90 to 95% relative humidity for 200 hours, sensitivity to be within \pm 3dB from initial sensitivity. (The measurement to be done after 2 hours of conditioning at 20° C).	
4	Thermal Shock Test	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 3dB from initial sensitivity. (The measurement to be done after 2 hours of conditioning at 20° C.	
5	Vibration Test	To be no interference in operation after vibrations, 10 Hz to 55 Hz for 1 minute full amplitude 1.52 mm, for 2 hours at three axes.	
6	Drop Test	To be no interference in operation after dropped to concrete floor each one time from 1 meter height at three directions in state of packing.	

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5. **Measurement Circuit** (Test Condition VS=1.5Vdc,RL=1.5KΩ)

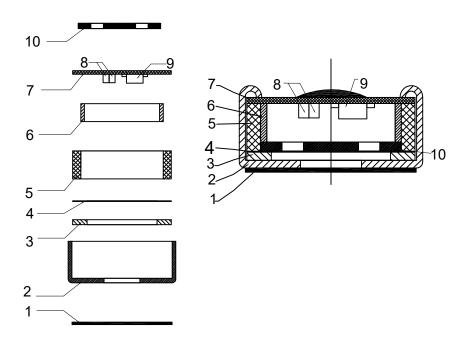


Typical Frequency Response CU+rve



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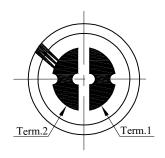
6. Structure

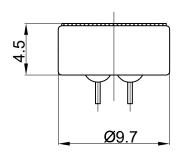


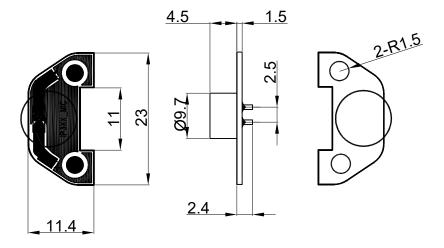
No.	Part name	Materials Type	Qty	Origin	Manufactur e	Remarks
序号	部件名称	材料型号	数量	产地	协力厂商	备注
1	FELT	Fabric cloth	1	China	Dongguan	
2	Case	AL	1	China	Shanghai	
3	Diaphragm	FEP50A	1	USA	Dupont	
4	Spacer	Mylar	1	China	Hebei	
5	Housping Chamber	Gather formaldehy de	1	China	Changzho u	
6	Copper ring	Copper tube	1	China	Changzho u	
7	P.C.B	FR-4	1	China	Shuzhou	
8	CHIP CAPACIT OR	33P	1	Japan	Murata	
9	FET	TF202C	1	Japan	SANY	
10	ELECTRE T BACK	Copper blank	1	China	Ningbo	

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7. Dimensions







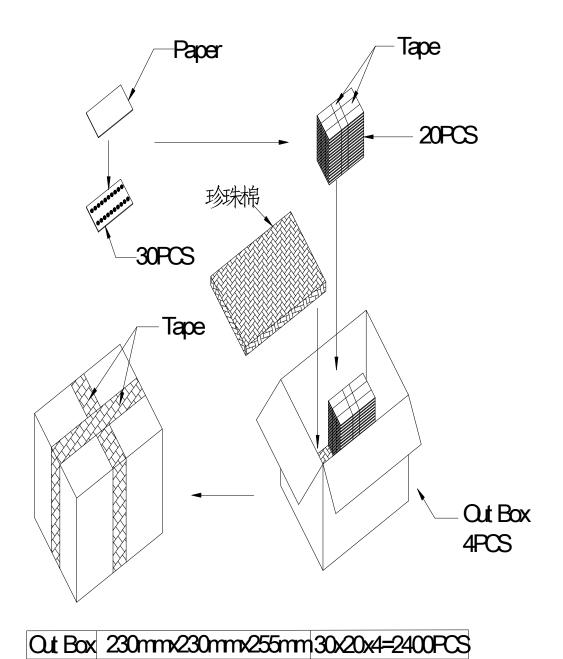
FIRST ANGLE PROJECTION

 \Leftrightarrow

UNIT : mm Tolerance : ± 0.2

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8. Packing



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9.	Revisio	n			
Rev. No.	DATE	PAGE	DESCRIP	TION	ВОМ
1.0	2013.12.20		Prima	ry	