

SPECIFICATION

Customer : Sharp Microwave oven

Applied To :

Product Name : Piezo Transducer

Model Name : KPT-1420A

Drawing No. : OEM2103

RoHS Compliance

Signature of Approval

[illegible]

Signature of KEPO

Approved by	Checked by	Issued by	Date



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1. Scope

This product specification is applied to the piezoelectric sounder in alarm systems. Please contact us when using this product for any other applications than described in the above.

2. General

- 2.1 Out-Diameter : Ø14.2 mm
- 2.2 Height : 11 mm
- 2.3 Weight : 2 g
- 2.4 Operating Temperature range:
-20~+70℃ without loss of function
- 2.5 Store Temperature range:
-30~+80℃ without loss of function

3. Electrical and Acoustic Characteristics.

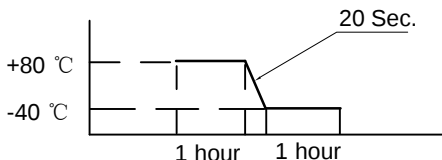
Test condition : 15 ~ 35 ℃, 25% ~ 85% RH, 860~1060 mbar

	Items	Specification
1	Rated Voltage	5Vp-p Square Wave
2	Max.Allowable Voltage	30Vp-p Square Wave
3	Max.Rated Current	2mA at 2.0KHz/5Vp-p Square Wave
4	Resonant Frequency	2.0± 0.5KHz
5	Min.Sound Pressure Level	70dB at 2.0KHz/5Vp-p Square Wave/10cm
6	Capacitance at 100Hz	15000pF± 30%
7	Case Material/Color	PC/BLACK

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4. Reliability Test

After test(1~7item), the transducer S.P.L . difference shall be within $\pm 10\text{dB}$, and the appearance not exist any change to be harmful to normal operation(e.g. cracks,rusts,damages and especially distortion).

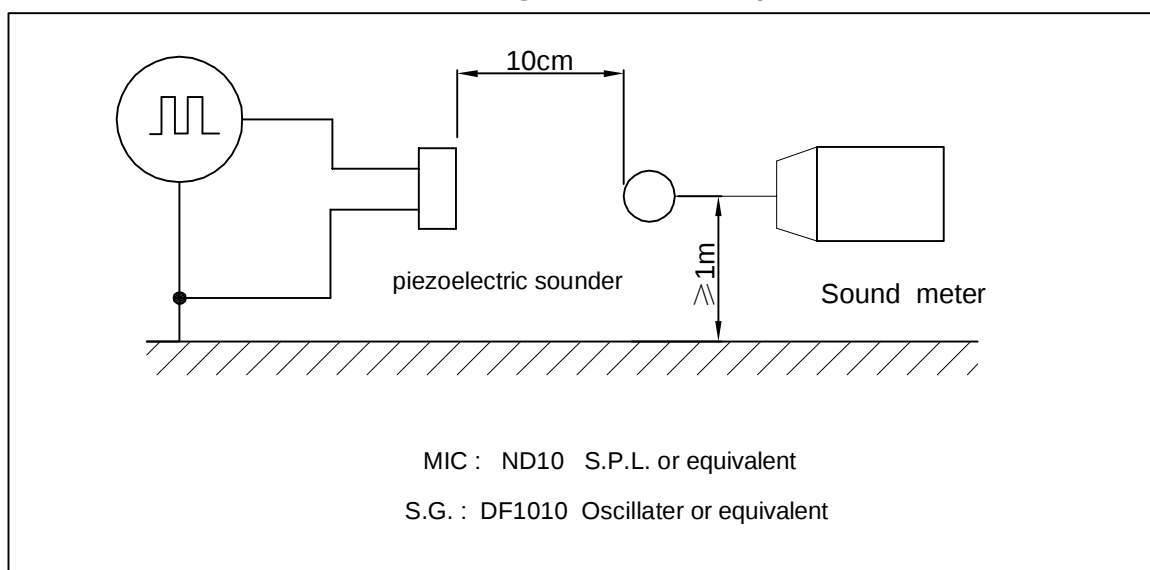
	Item	Specification
1	High Temperature Test	After being worked in a chamber with $+85\pm 2\text{ }^{\circ}\text{C}$ for 240h and then being placed in natural condition for 2h, sounder shall be measured.
2	Low Temperature Test	First being worked in a chamber with $-40\pm 2\text{ }^{\circ}\text{C}$ for 240h and then being placed in a chamber with $-40\pm 2\text{ }^{\circ}\text{C}$ for 16h, finally being placed in natural condition for 2h, sounder shall be measured.
3	Humidity Test	After being placed in a chamber with 90 to 95%R.H. at $+60\pm 2^{\circ}\text{C}$ for 2 h and then being placed in natural condition for 240h , sounder shall be measured.
4	Thermal Shock Test	After being worked in a chamber at $+80\pm 2\text{ }^{\circ}\text{C}$ for 1 hour, then sounder shall be placed in a chamber at $-40\pm 2\text{ }^{\circ}\text{C}$ for 1 hour(1 cycle is the below diagram). After 10 above cycles, sounder shall be measured after being placed in natural condition for 1 hour.  The diagram illustrates a thermal shock cycle. It shows a temperature profile with two horizontal segments: one at $+80\text{ }^{\circ}\text{C}$ for 1 hour and another at $-40\text{ }^{\circ}\text{C}$ for 1 hour. A diagonal line connects the two segments, representing the transition time, which is labeled as 20 Sec.

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4. Reliability Test

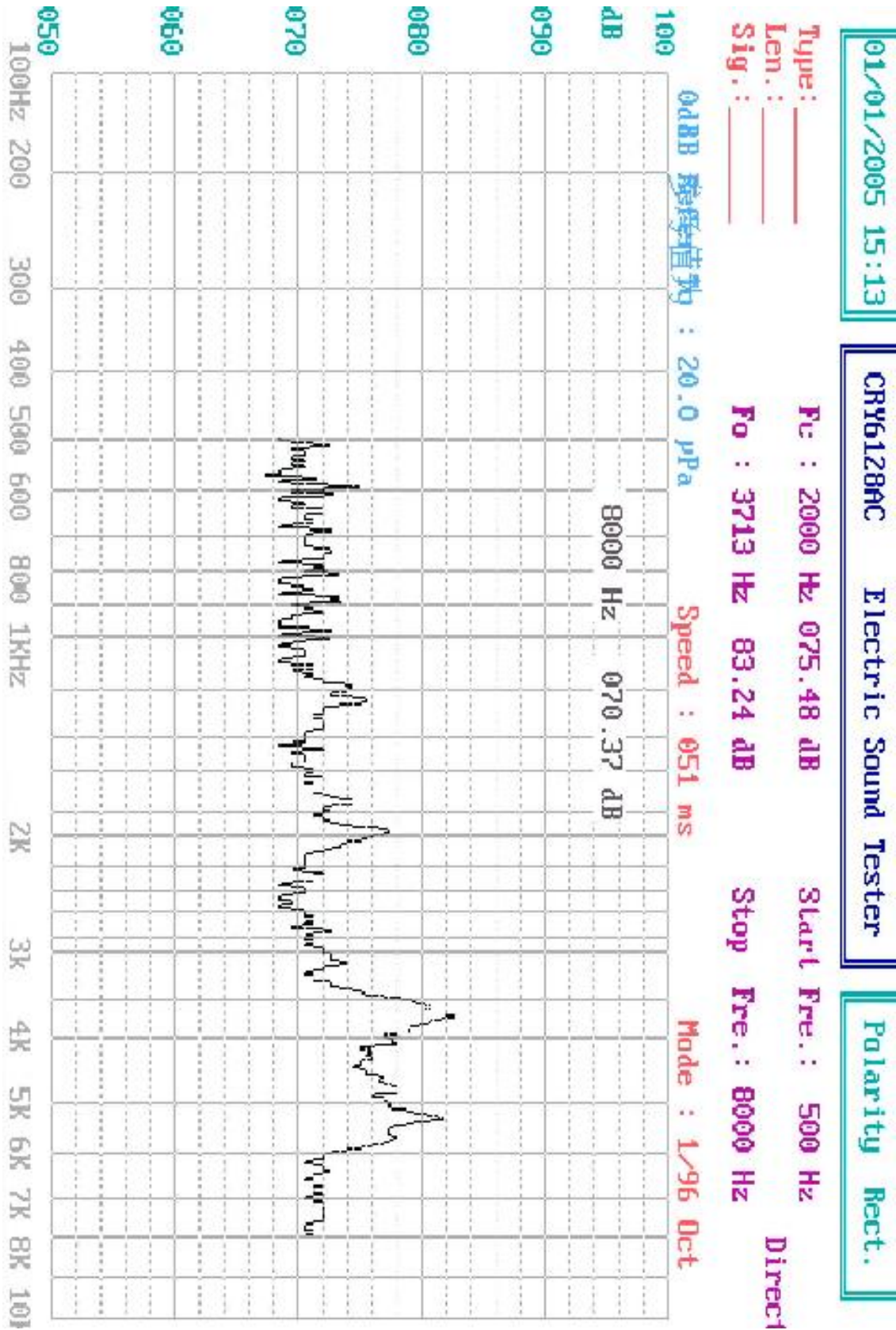
	Item	Specification
5	Vibration Resistance	Sounder shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 30Hz band of vibration frequency to each of 3 perpendicular directions for 2 hour.
6	Drop Test	Sounder packed in the carton are dropped in six direction from the height of 80cm to the concrete floor.
7	Solderability	Lead terminals are immersed in rosin for 5 seconds and the immersed in solder bath of $+260 \pm 5^{\circ} \text{C}$ for 3 ± 0.5 seconds.
8	Terminal Strength Pulling	The force 10 seconds of 9.8N is applied go each terminal in axial direction.
9	Run continuously test	Run continuously for 240 hours with input signal 20Vp-p, 4KHz Square wave, sounder shall be measured after being placed in natural condition for 4 hours.

5. Measurement Block Diagram & Response curve



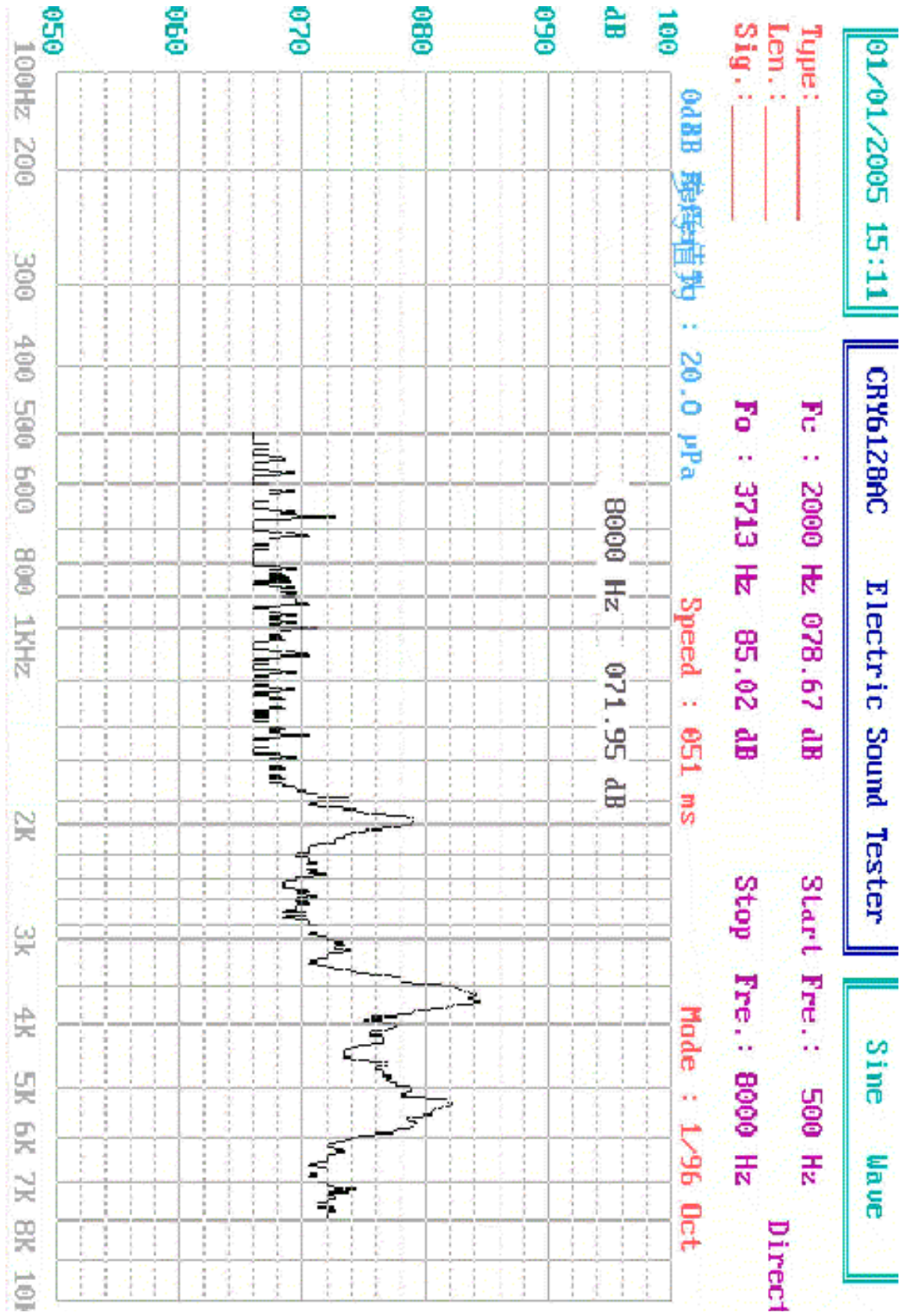
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1 Vrms Sine Wave/10cm



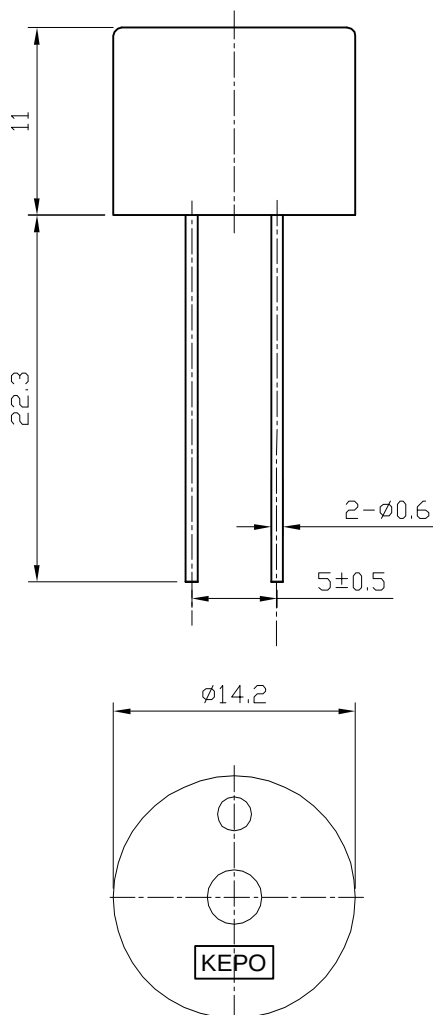
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3 Vp-p Square Wave/10cm



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7. Dimensions



FIRST ANGLE PROJECTION



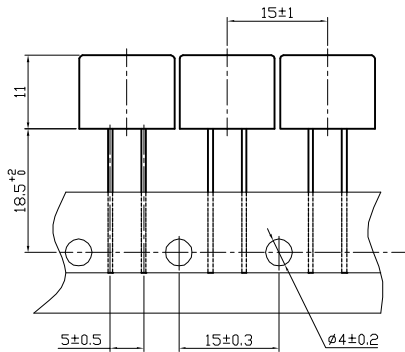
UNIT : mm

Tolerance : ± 0.5

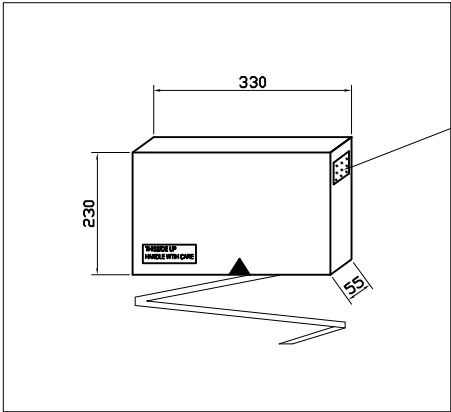
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8. Packing



Eligibility Certificate		42
Company Name: NingBo KEPO Electronics co.,LTD		
P/N: RALMBA008DRZZ	QTY : 350PCS	
Production Date:	Inspector :	
Shipment Date:		
Lot Number:		
ROHS Compliance		76



Lable

QTY: 350Pcs
 SIZE:330x55x230mm

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9. Revision

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