

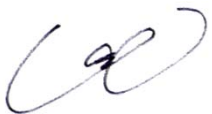


# SPECIFICATIONS

PART NAME. : PIEZO SOUNDER

MODEL NO. : CBE2220BP

Signature of Approval

Signature of Dae young

Issued by	Check by	Approved	Date
			SEP. 30, 2002

# SPECIFICATIONS

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PART NAME

PIEZO SOUNDER

MODEL NO.

CBE2220BP

ISSUED DATE

SEP. 30, 2002

## REVISION

Rev.No.	DATE	PAGE	DESCRIPTION	SIGN
1	2002. 09. 30	/	primary	
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1. Application: This specification is applicable to piezo-sounder

2. Model no. : CBE2220BP

3. Characteristics. (at 25 °C)

PARAMETER	MODEL NO.	UNIT
Operating Temperature	CBE2220BP -40 TO +85	°C
Sound Pressure	Min.85(at 9 Vp-p , 2KHz , 10cm )	dB
Resonant Frequency	2.0 ± 0.5	khz
Electrostatic capacitance	20,000pf ± 30% (at 1khz)	Pf
Input voltage	Max.30	V <sub>P-P</sub>

4. Measurements.

4.1 Standard test conditions.

Temperature	25 ± 3	°C
Relative humidity	50 TO 70	%

4.2 Electrostatic capacitance.

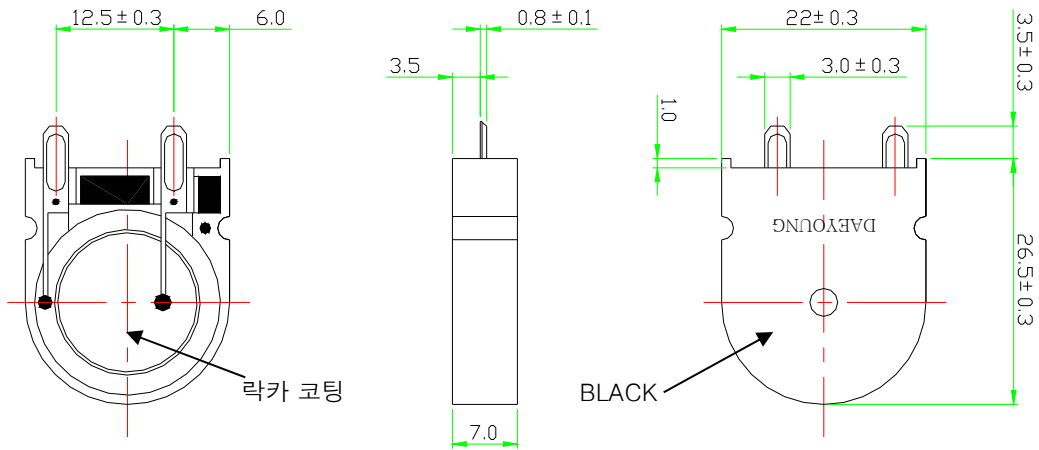
Instrument	LCR meter ( hp4276A )
Measuring conditions	1khz, 1vrms

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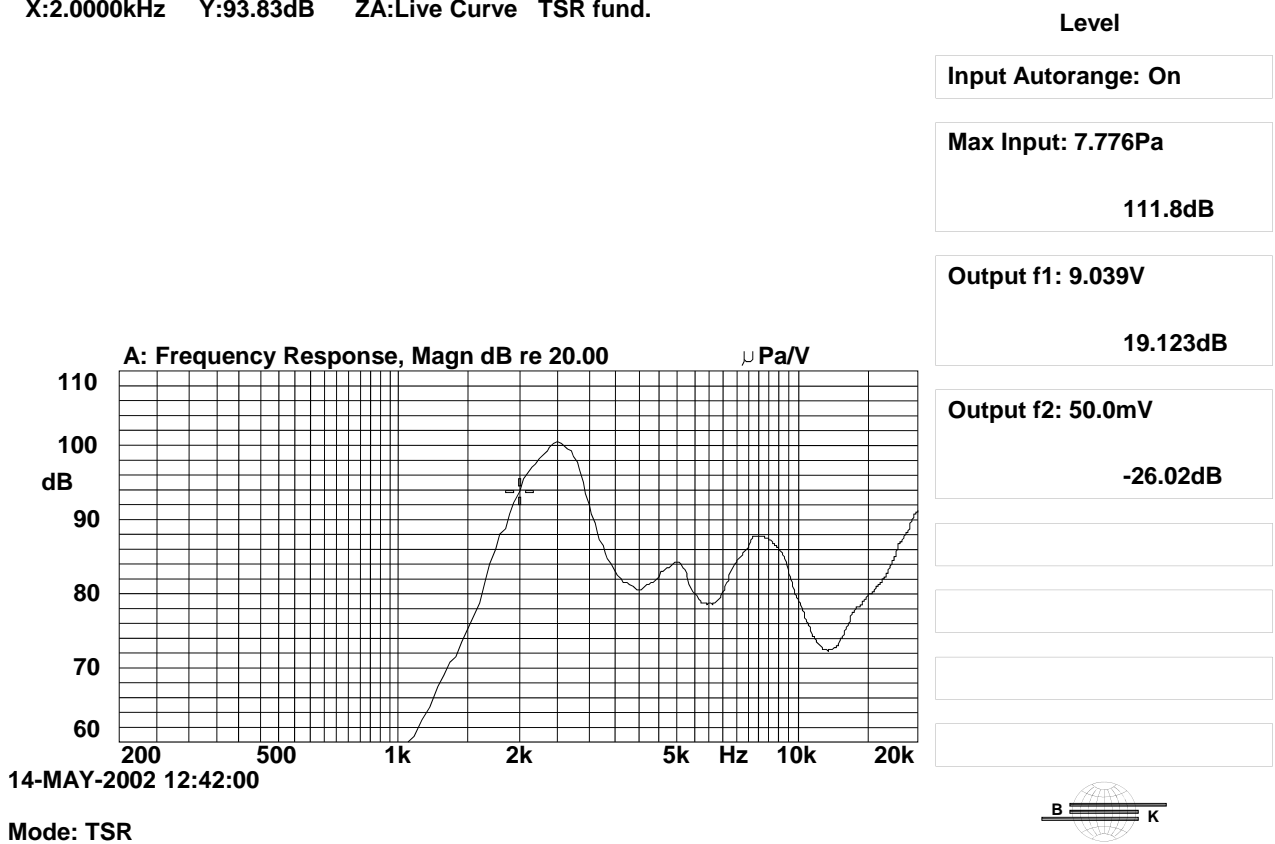
## 5. DIMENSIONS



( FIG. 1.)

## 6. STANDARD FREQUENCY RESPONSE CURVE(ONLY FOR REFERENCE)

X:2.000kHz Y:93.83dB ZA:Live Curve TSR fund.



( FIG. 2.)

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## 7. Physical Characteristics.

Item	Test Condition	Specification
7-1	Shock	Sounder shall be measured after being applied shock(980m/s <sup>2</sup> ) for each three mutually perpendicular directions to each of 3 times by half sine wave.
7-2	Vibration Resistant	Sounder shall be measured after being applied vibration of 1.5mm p-p with 10 to 55hz band of vibration frequency to each of 3 perpendicular directions for 2 hours.
7-3	Soldering Heat Resistance	Lead terminals are immersed up to 1.5mm from sounders body in solder bath of +300± 5 °C for 3± 0.5 seconds or +260± 5 °C for 10 ± 1 seconds, and then sounder shall be measured after being placed in natural condition for 4 hours.
7-4	Solderability	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +230± 5 °C for 3±0.5 seconds.
7-5	Terminal Strength Pulling	The force 10 seconds of 9.8N is applied to each terminal in axial direction.

The measured value shall meet table 1.

90% min. lead terminals shall be wet with solder. (Except the edge of terminal)

No visible damage and cutting off.

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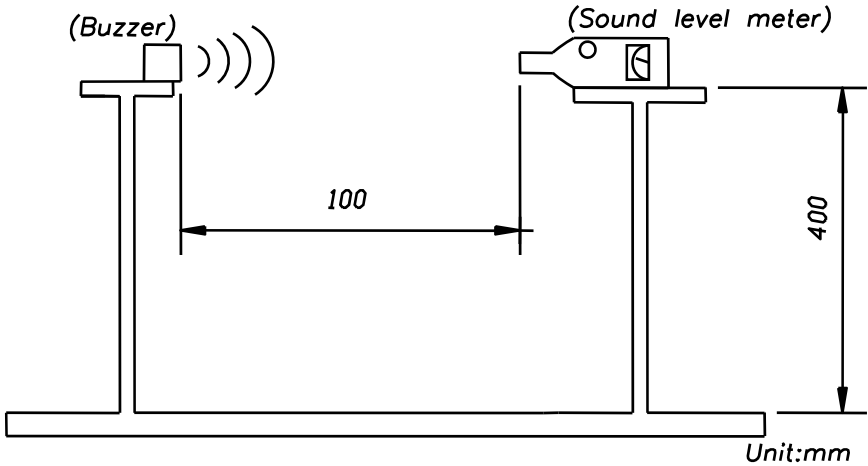
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## 8. Environmental Characteristics.

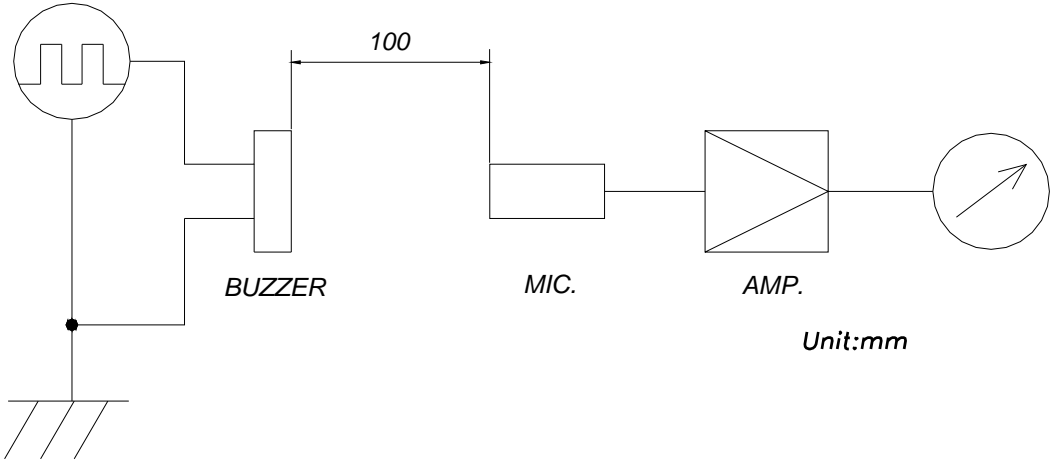
	Item	Test Condition	Specification
8-1	Dry Heat Test (Storage)	After being placed in a chamber with $+85 \pm 2^\circ\text{C}$ for 240 hours and then being placed in natural condition for 4 hours, sounder shall be measured.	The measured value shall meet table 1.
8-2	Cold Test (Storage)	After being placed in a chamber with $-40 \pm 2^\circ\text{C}$ for 240 hours and then being placed in natural condition for 4 hours, sounder shall be measured.	
8-3	Humidity	After being placed in a chamber with 90 to 95%R.H. at $+40 \pm 2^\circ\text{C}$ for 240 hours and then being placed in natural condition for 4 hours, sounder shall be measured.	
8-4	Temperature Cycle	After being placed in a chamber at $-40 \pm 2^\circ\text{C}$ for 30 minutes, sounder shall be placed at room temperature( $+20^\circ\text{C}$ ). After 15 minutes at this temperature, sounder shall be placed in a chamber at $+85 \pm 2^\circ\text{C}$ . After 30 minutes at this temperature, sounder shall be and returned to room temperature( $+20^\circ\text{C}$ ) for 15 minutes. After 5 above cycles, sounder shall be measured after being placed in natural condition for 4 hours.	

9. Measuring Method

9-1 S.P.L Measuring Circuit



(FIG. 3.)

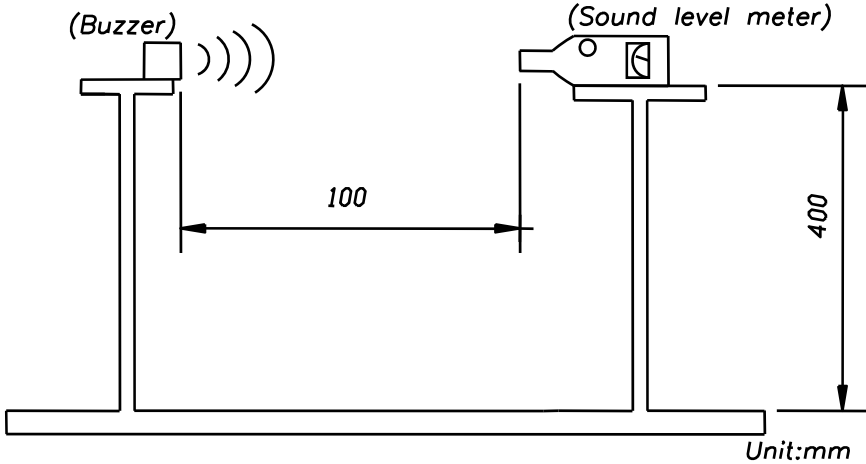


(FIG. 4.)

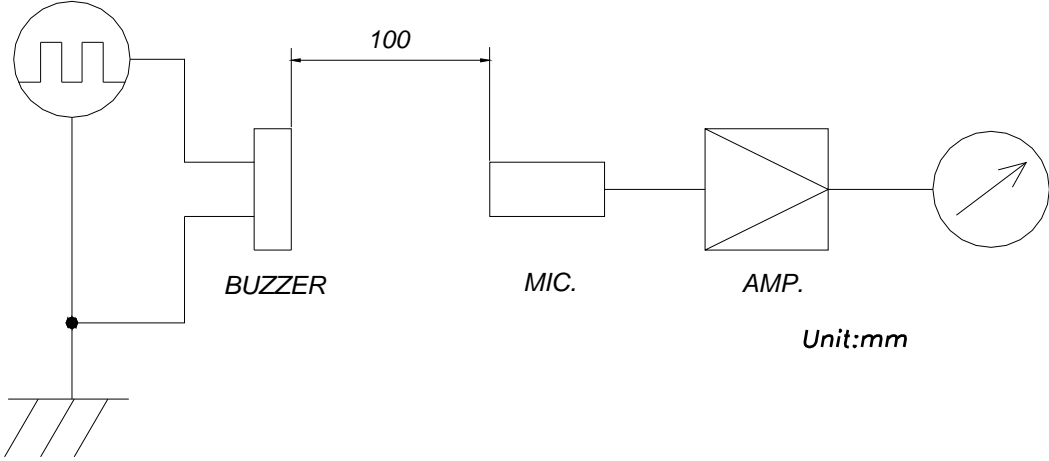
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## 9. Measuring Method

### 9-1 S.P.L Measuring Circuit



(FIG. 3.)



(FIG. 4.)

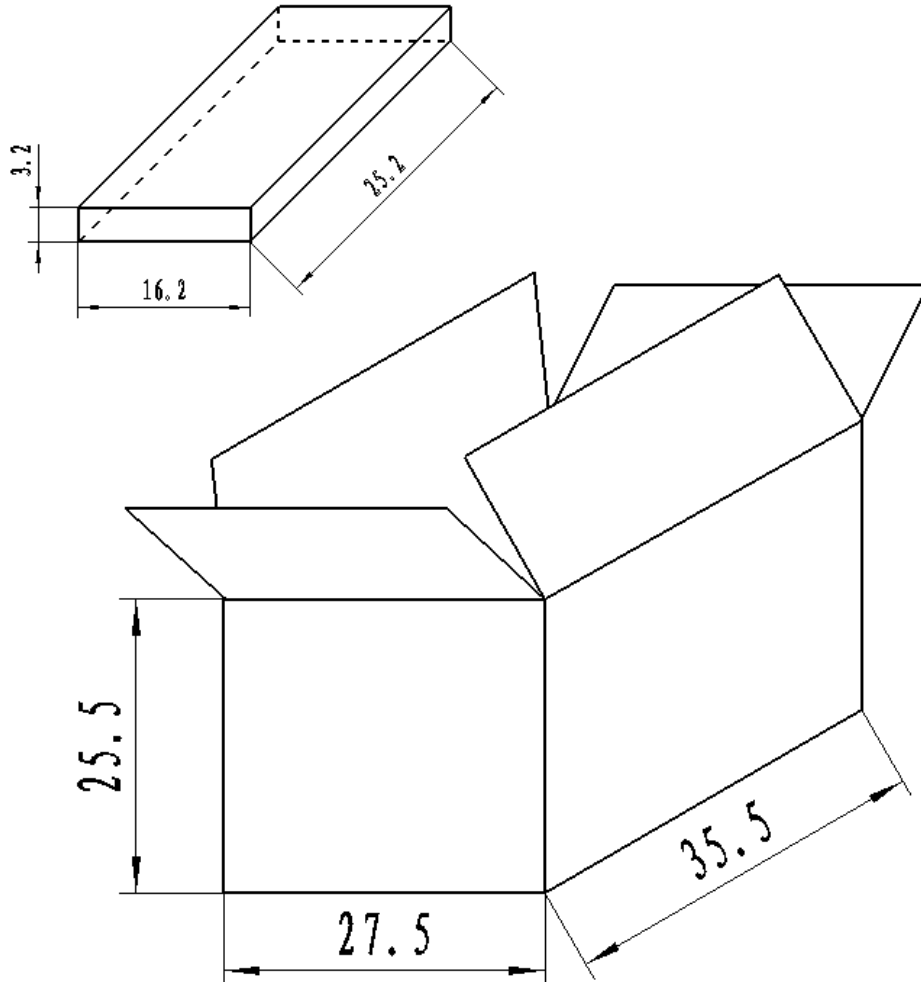


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## 10. Packing Information



### NOTES:

- 1.250 PCS per tray
- 2.Total 12 tray per carton
- 3.Total 3000 PCS carton
- 4.Volume: $35.5 \times 27.5 \times 25.5\text{cm}$