

Piezoelectric Ceramic Buzzer (Pin Type)

2-3	HPA22D
4-5	PKM13EPYH4002-B0
6-7	PKM13EPYH4000-A0
8-9	HPM14A
10-11	HPA17F
12-13	KSE-R-2240A

Piezoelectric Ceramic Buzzer
1. Product type: Piezoelectric Ceramic Buzzer (Pin Type)
2. Technical Parameter Measuring condition

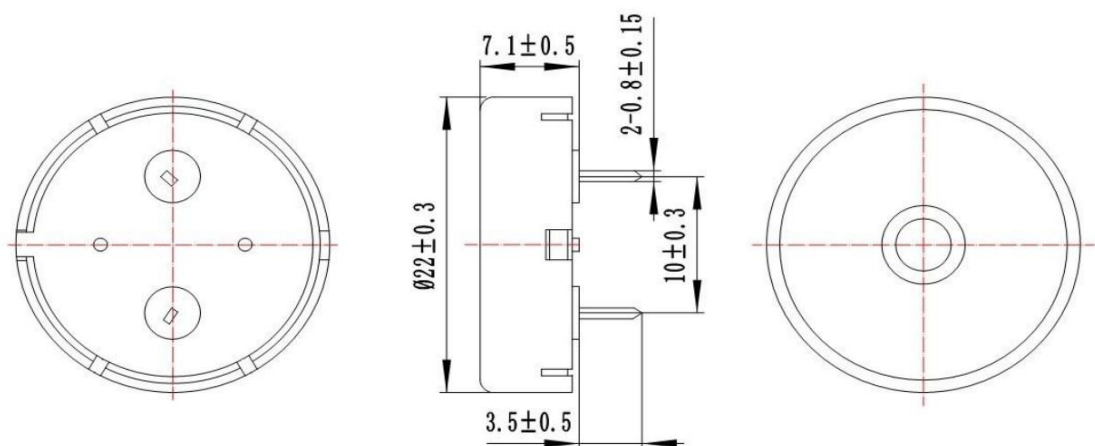
Part shall be measured under a condition (Temperature: 5 ~ 35°C, Humidity: 45% ~ 85%R.H., Atmospheric pressure: 860 ~ 1060hPa) unless the standard condition (Temperature: 25±3°C, Humidity: 60±10%R.H. Atmospheric pressure: 860 ~ 1060hPa) is regulated to measure.



1	Resonant Frequency	4000Hz
2	Operating Voltage	1 ~ 25 Vp-p
3	Rated Current	Max.5mA , At 4000Hz 50% duty Square Wave 10Vp-p
4	Sound Output at 10cm	Min.90dB, At 4000Hz 50% duty Square Wave10Vp-p
5	Capacitance	25000 ± 30% pF At 120Hz
6	Operating Temperature	-20°C ~ +105°C
7	Store Temperature	-30°C ~ +105°C
8	Net Weight	Approx 2.0g
9	RoHS	Yes

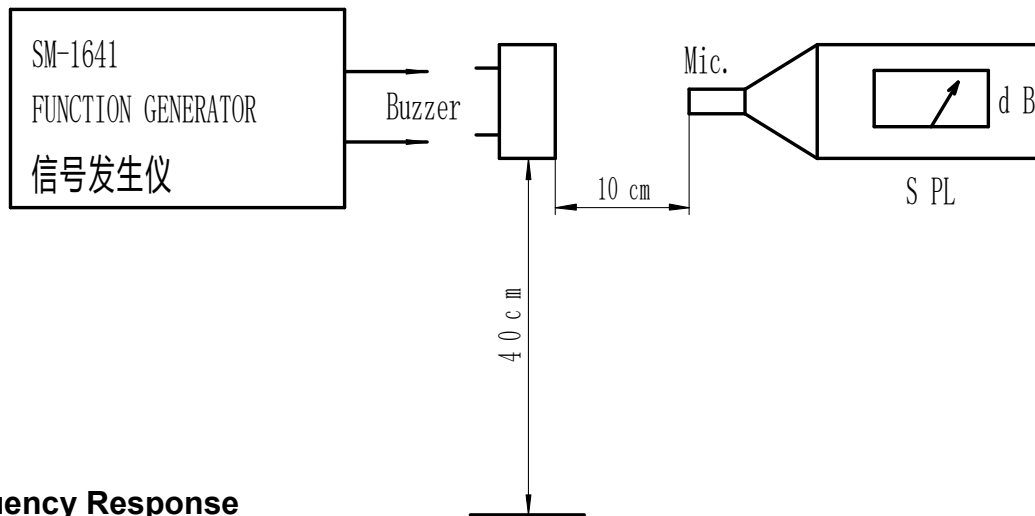
3. Dimensions

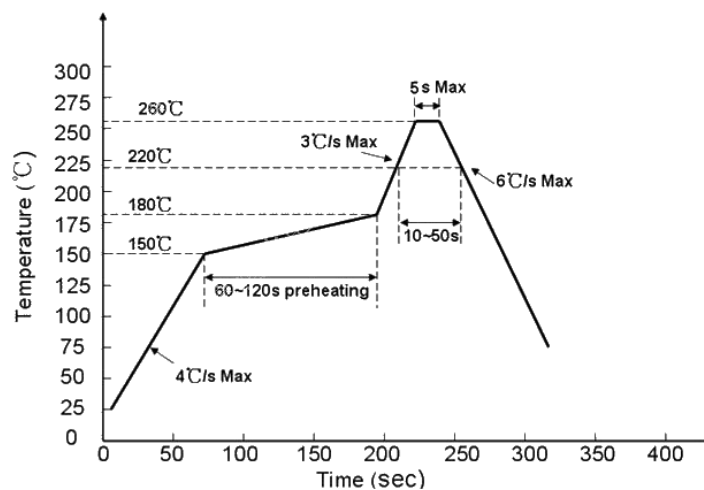
Unit: mm



*Unit: mm; Tolerance: ±0.5mm Except Specified

*Housing Material: Black PBT

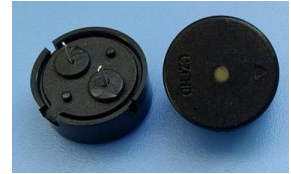
Piezoelectric Ceramic Buzzer
4. Electrical And Acoustical Measuring Condition
Recommended Setting

5. Frequency Response

7. Recommended wave soldering temperature


1. Product type: Piezoelectric Ceramic Buzzer (Pin Type)

2. Technical Parameter Measuring condition

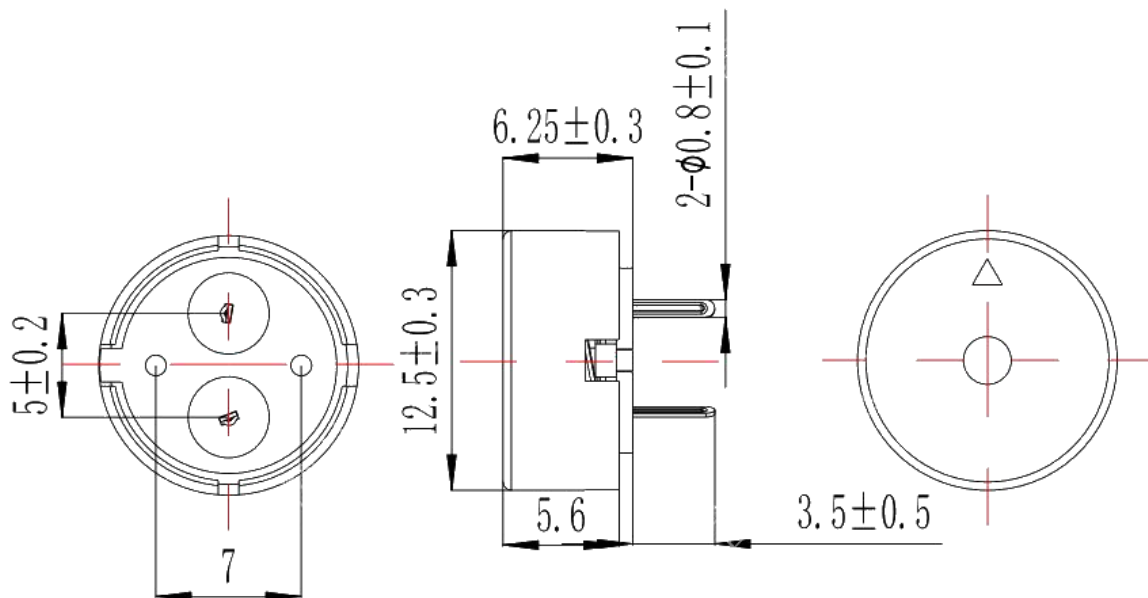
Part shall be measured under a condition (Temperature: 5 ~ 35℃, Humidity: 45% ~ 85%R.H., Atmospheric pressure: 860 ~ 1060hPa) unless the standard condition (Temperature: 25±3℃, Humidity: 60±10%R.H. Atmospheric pressure: 860 ~ 1060hPa) is regulated to measure.



1	Resonant Frequency	4000Hz
2	Operating Voltage	3 ~ 20 Vp-p
3	Rated Current	Max.3mA , At 4KHz 50% duty Square Wave 5Vp-p
4	Sound Output at 10cm	Min.80dB, At 4KHz 50% duty Square Wave 5Vp-p
5	Capacitance	12000 ± 30% pF At 1KHz
6	Operating Temperature	-20℃ ~ +80℃
7	Store Temperature	-30℃ ~ +85℃
8	Net Weight	Approx 0.75g
9	RoHS	Yes

3. Dimensions

Unit: mm



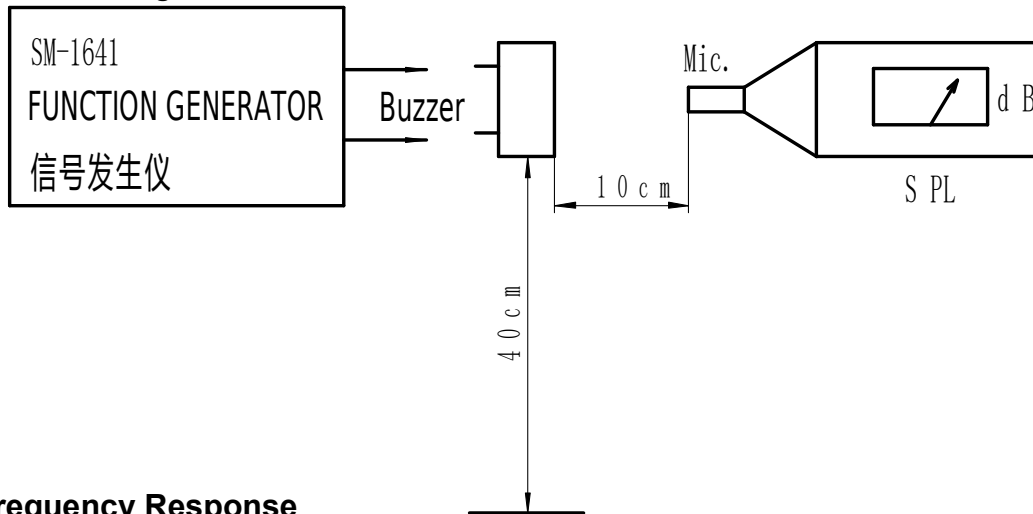
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*Housing Material: Black PBT

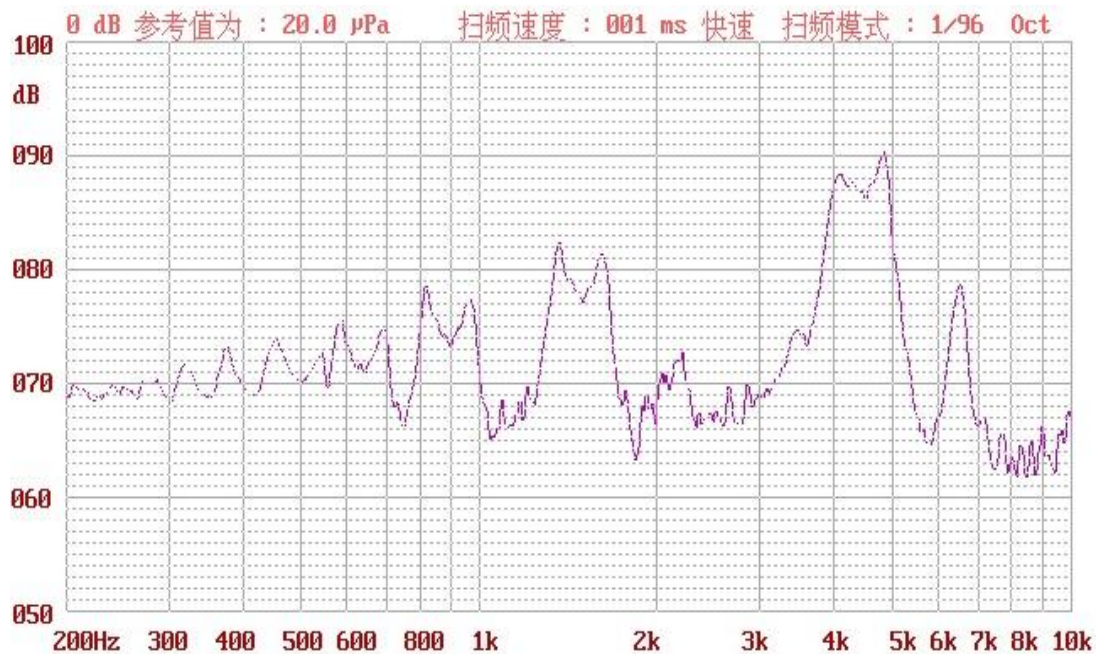
4. Electrical And Acoustical Measuring Condition

Piezoelectric Ceramic Buzzer

Recommended Setting

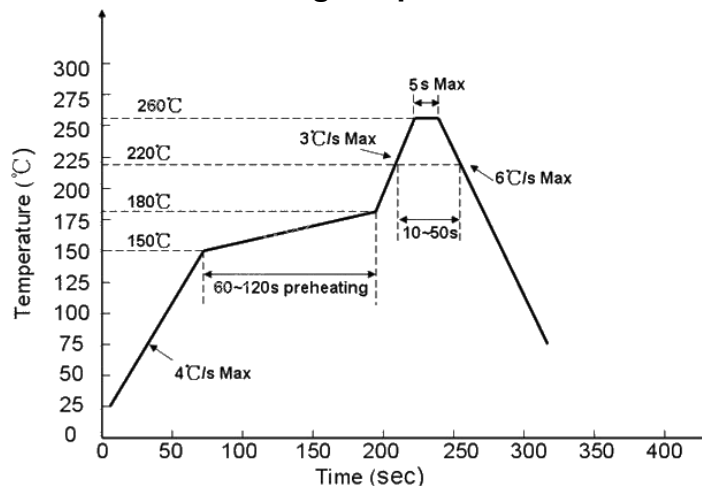


5. Frequency Response



5Vp-p 50% duty Square wave, 10cm

7. Recommended wave soldering temperature



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2. Technical Parameter Measuring condition

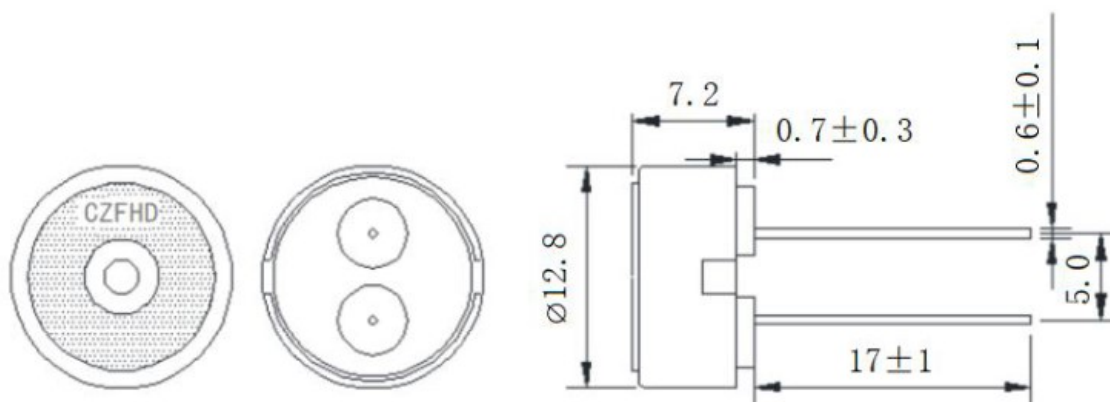
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1	Resonant Frequency	4000Hz
2	Operating Voltage	2- 25 Vp-p
3	Resonance Impedance	≤ 500Ω At 9.0KHz
4	Rated Current	Max.8mA At 4KHz 50% duty Square Wave 12Vp-p
5	Sound Output at 10cm	Min.80dB, At 4KHz 50% duty Square Wave 12Vp-p
6	Capacitance	9000±30% pF At 1KHz
7	Operating Temperature	-40°C ~ +85°C
8	Store Temperature	-40°C ~ +85°C
9	Net Weight	Approx 0.75g
10	RoHS	Yes

3. Dimensions

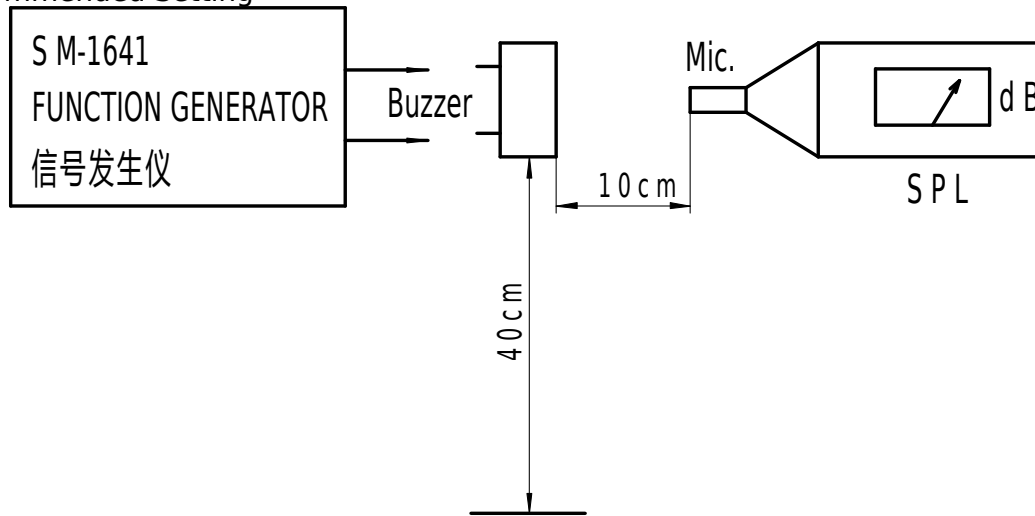
Unit: mm



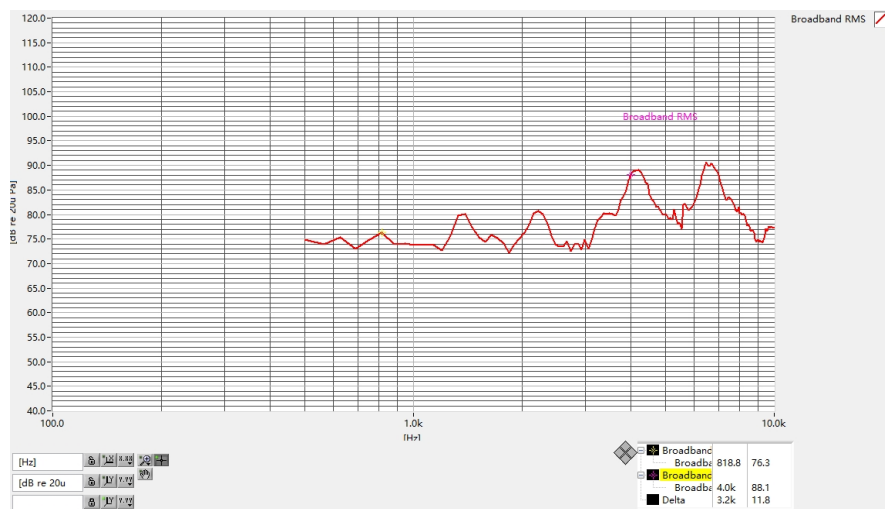
*Unit: mm; Tolerance: ±0.5mm Except Specified

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4. Electrical And Acoustical Measuring Condition Recommended Setting

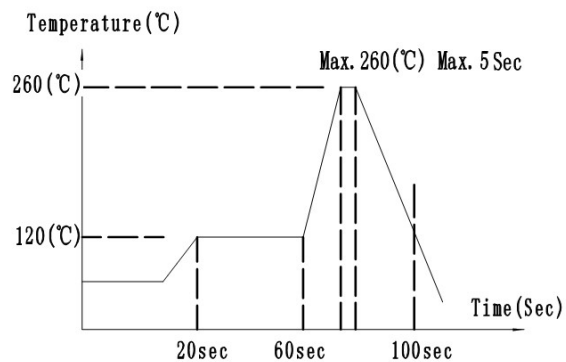


5. Frequency Response



12Vp-p 50% duty Square wave, 10cm

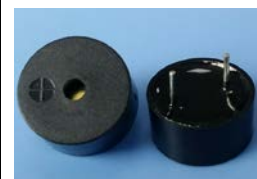
6. Recommended the wave soldering temperature



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2. Technical Parameter
Measuring condition

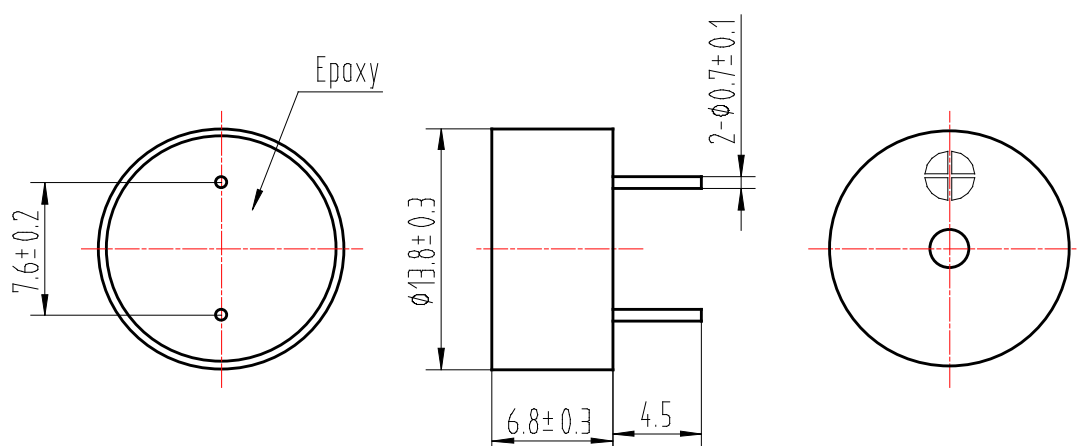
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1	Resonant Frequency	4000Hz
2	Operating Voltage	1 ~ 25 Vp-p
3	Rated Current	Max.5mA , At 4KHz 50% duty Square Wave 5Vp-p
4	Sound Output at 10cm	Min. 85dB, At 4KHz 50% duty Square Wave 5Vp-p
5	Capacitance	12000 ± 30% pF At 1KHz
6	Operating Temperature	-20°C ~ +70°C
7	Store Temperature	-30°C ~ +80°C
8	Net Weight	Approx 0.5g
9	RoHS	Yes

3. Dimensions

Unit: mm

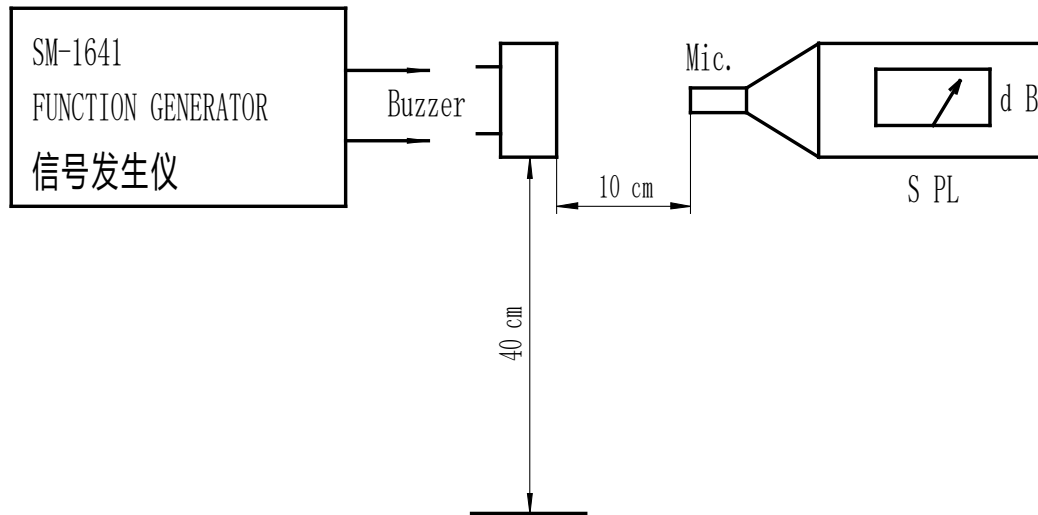


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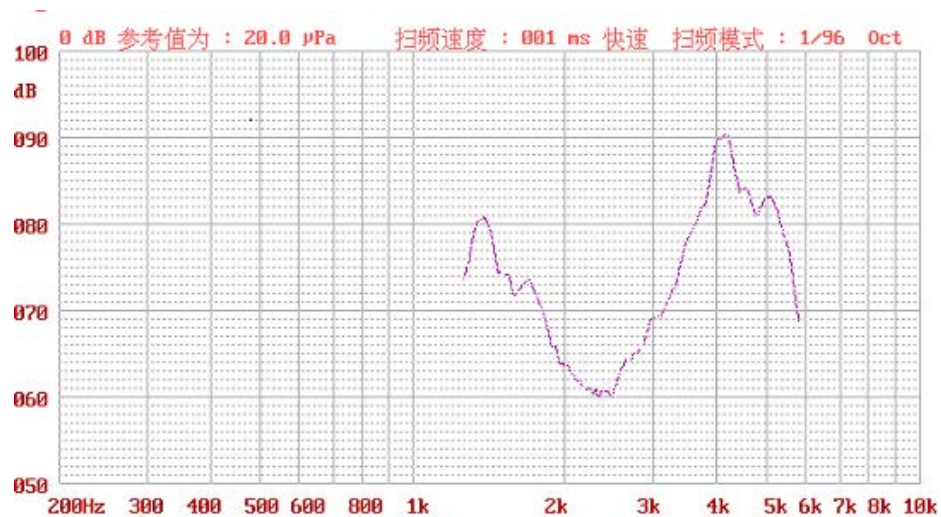
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4. Electrical And Acoustical Measuring Condition

Recommended Setting



5. Frequency Response



5Vp-p 50% duty Square wave, 10cm

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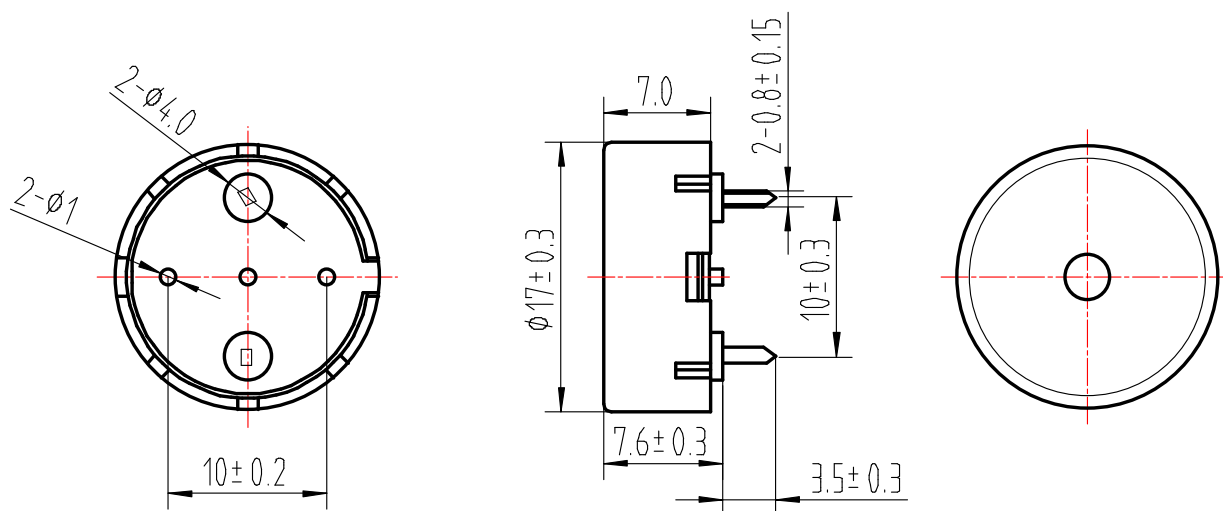
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1	Resonant Frequency	4000Hz
2	Operating Voltage	1 ~ 25 Vp-p
3	Rated Current	Max.5mA , At 4KHz 50% duty Square Wave 5Vp-p
4	Sound Output at 10cm	Min. 80dB, At 4KHz 50% duty Square Wave 5Vp-p
5	Capacitance	15000 ± 30% pF At 1KHz
6	Operating Temperature	-20℃ ~ 70℃
7	Store Temperature	-30℃ ~ 80℃
8	Net Weight	Approx 1.5g
9	RoHS	Yes

3. Dimensions

Unit: mm

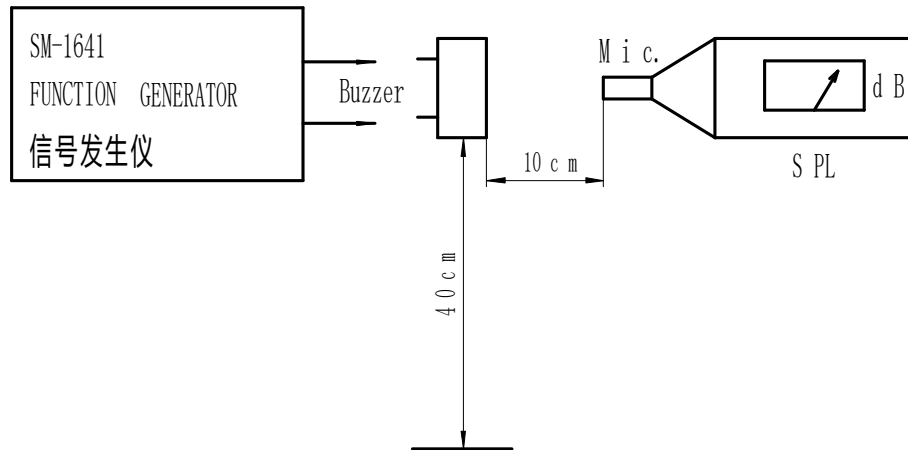


*Unit: mm; Tolerance: ± 0.5mm Except Specified

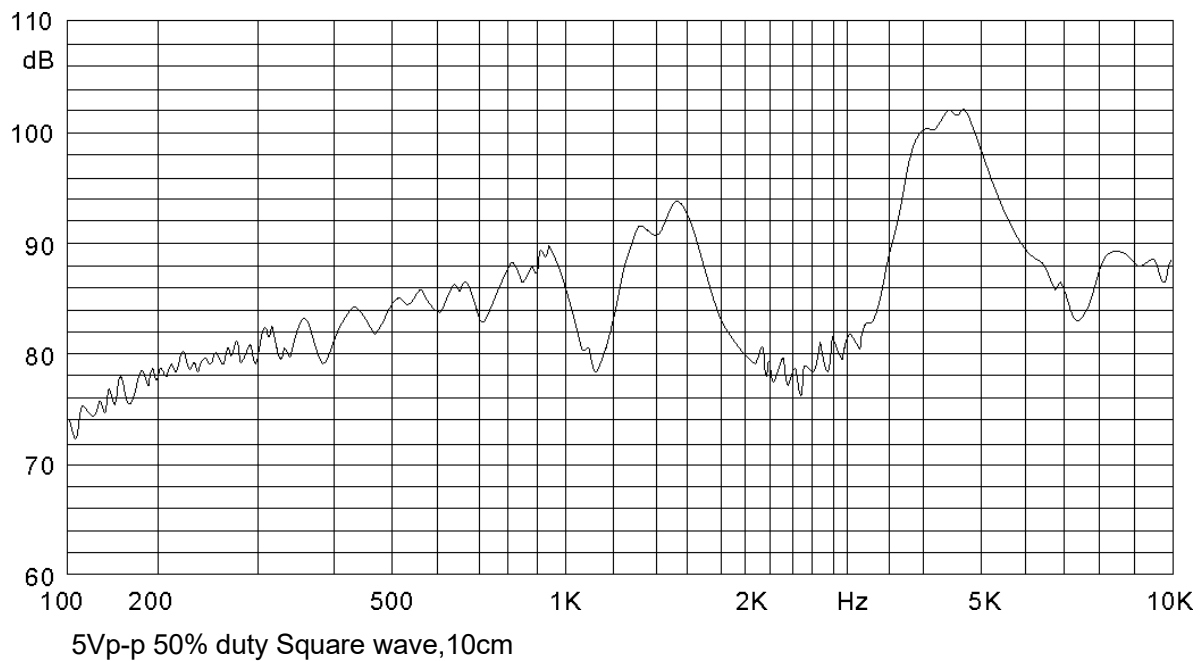
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4. Electrical And Acoustical Measuring Condition

Recommended Setting



5. Frequency Response



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2. Technical Parameter Measuring condition

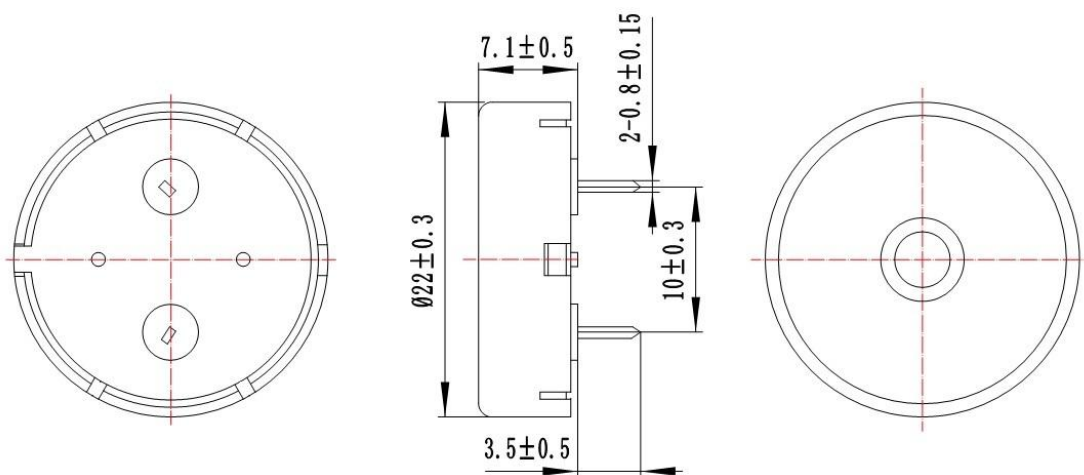
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9	RoHS	Yes

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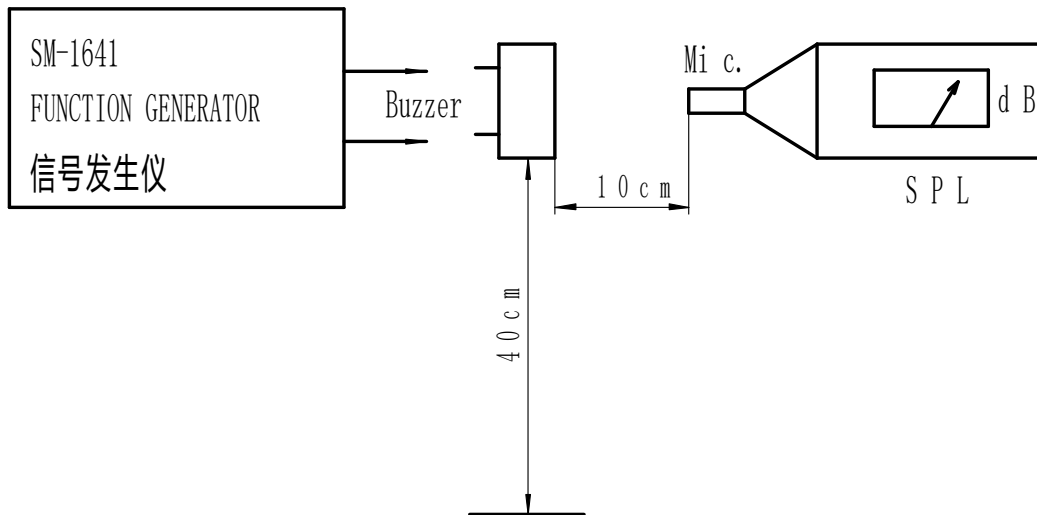


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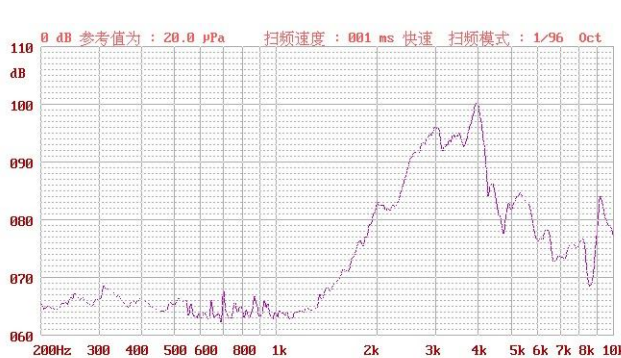
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4. Electrical And Acoustical Measuring Condition

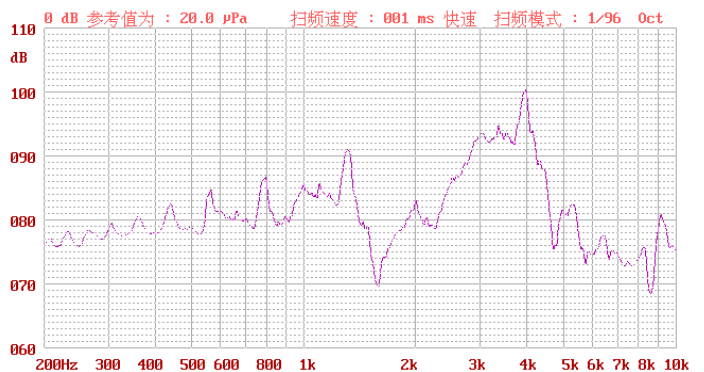
Recommended Setting



5. Frequency Response



3.6Vrms sinusoidal wave @10cm



5Vp-p 50% duty Square wave 10cm