

# Electro-Magnetic Buzzer with built-in oscillating circuit (Pin Type)

2-3	HCM1201X
4-5	HCM1203X
6-7	HCM1205X
8-9	HCM1206X
10-11	HCM1606X
12-13	HCM1212X
14-15	HCM1612X
16-17	HCM0903AX



# 1. Product type: Electro-Magnetic Buzzer with built-in oscillating circuit (Pin Type)

#### 2. Technical Parameter

Measuring condition

Part shall be measured under a condition (Temperature: 5  $\sim$  35 °C, Humidity: 45%  $\sim$  85%R.H.,

Atmospheric pressure: 860  $_{\sim}$  1060hPa) unless the standard condition (Temperature: 25±3 $^{\circ}$ C,

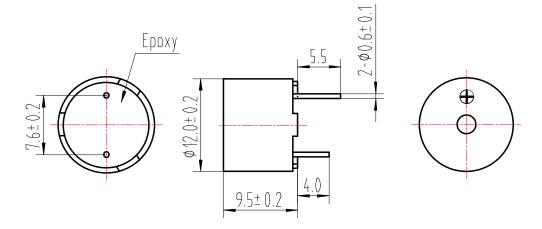
Humidity:  $60\pm10\%$ R.H. Atmospheric pressure:  $860\sim1060$ hPa) is regulated to measure.



1	Rated Voltage	1.5VVDC	
2	Operating Voltage	1.3-2VDC	
3	Rated Current	Max.20mA, at1.5VDC	
4	Sound Output at 10cm	Min.75dB, at 1.5VDC	
5	Resonant Frequency	2300±300 Hz	
6	Tone	Continuous	
7	Operating Temperature	-40- +85℃	
8	Storage Temperature	-40 - +85℃	
9	RoHS	Yes	
10	Weight	Approx 1.7g	

#### 3. Dimensions

Unit: mm



\*Housing Material: Black PBT

Tolerance:  $\pm 0.5$ mm Except Specified

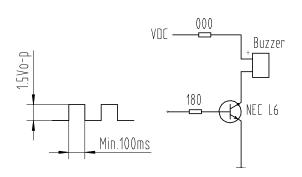


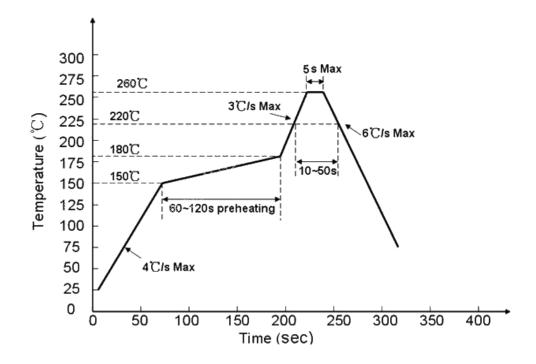
# 5. Electrical And Acoustical Measuring Condition

#### a) Recommended Setting

# Buzzer Mic. Buzzer Mic. SPL Frequency

#### b) Recommended Test Circuit







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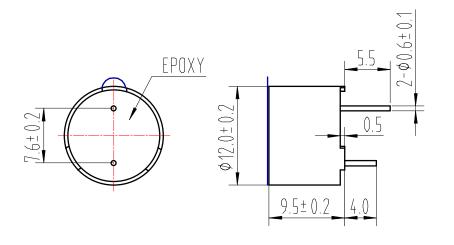
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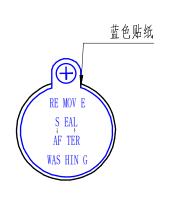


1	Rated Voltage	3VDC	
2	Operating Voltage	2-5VDC	
3	Rated Current	Max.30mA, at 3VDC	
4	Sound Output at 10cm	Min.85dB, at 3VDC	
5	Resonant Frequency	2300 ± 300 Hz	
6	Tone	Continuous	
7	Operating Temperature	-20- +70℃	
8	Storage Temperature	-30 - +80 ℃	
9	RoHS	Yes	
10	Weight	Approx 1.7g	

#### 3. Dimensions

Unit: mm





\*Housing Material: Black PBT

Tolerance:  $\pm 0.5$ mm Except Specified

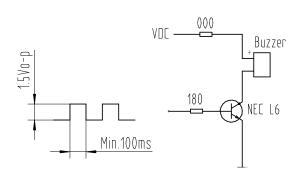


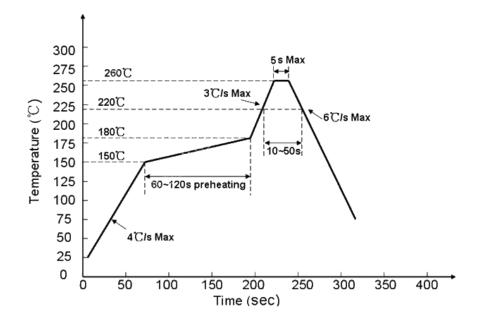
# 5. Electrical And Acoustical Measuring Condition

#### a) Recommended Setting

# Buzzer Mic. Power SPL Frequency

#### b) Recommended Test Circuit







# 1. Product type: Electro-Magnetic Buzzer with built-in oscillating circuit (Pin Type)

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Measuring condition

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Atmospheric pressure: 860  $_{\sim}$  1060hPa) unless the standard condition (Temperature: 25±3°C,

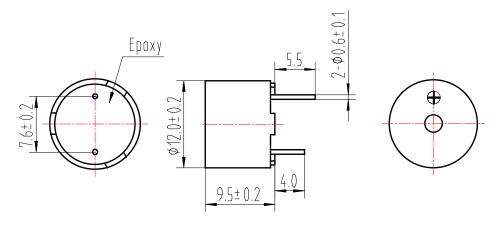
Humidity:  $60\pm10\%$ R.H. Atmospheric pressure:  $860\sim1060$ hPa) is regulated to measure.



1	Rated Voltage	5VDC	
2	Operating Voltage	3-8VDC	
3	Rated Current	Max.30mA, at 5VDC	
4	Sound Output at 10cm	Min.85dB, at 5VDC	
5	Resonant Frequency	2300± 300 Hz	
6	Tone	Continuous	
7	Operating Temperature	-20- +70°C	
8	Storage Temperature	-30 - +80°C	
9	RoHS	Yes	
10	Weight	Approx 1.7g	

#### 3. Dimensions

Unit: mm



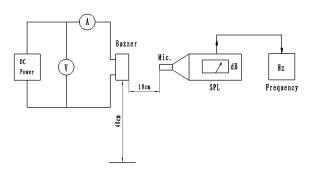
\*Housing Material: Black PBT

Tolerance: ± 0.5mm Except Specified

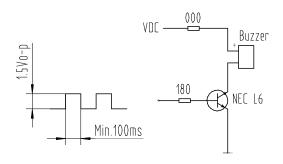


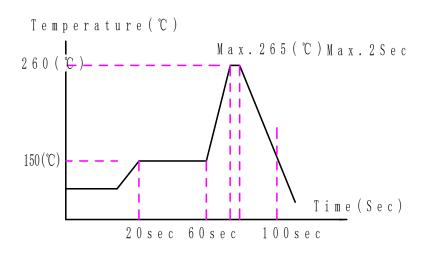
# **5. Electrical And Acoustical Measuring Condition**

#### a) Recommended Setting



#### b) Recommended Test Circuit







# 1. Product type: Electro-Magnetic Buzzer with built-in oscillating circuit (Pin Type)

#### 2. Technical Parameter

Measuring condition

Part shall be measured under a condition (Temperature: 5  $\sim$  35 °C, Humidity: 45%  $\sim$  85%R.H.,

Atmospheric pressure: 860  $\sim$  1060hPa) unless the standard condition (Temperature: 25±3 $^{\circ}$ C,

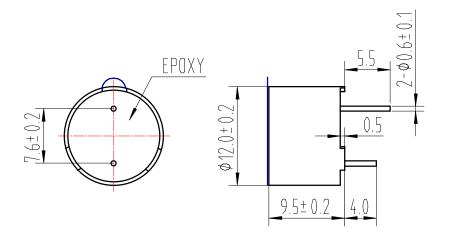
Humidity:  $60\pm10\%$ R.H. Atmospheric pressure:  $860\sim1060$ hPa) is regulated to measure.



1	Rated Voltage	6VDC	
2	Operating Voltage	4-7VDC	
3	Rated Current	Max.30mA, at 6VDC	
4	Sound Output at 10cm	Min.85dB, at 6VDC	
5	Resonant Frequency	2300±300 Hz	
6	Tone	Continuous	
7	Operating Temperature	-20- +70°C	
8	Storage Temperature	-30 - +80 ℃	
9	RoHS	Yes	
10	Weight	Approx 1.7g	

#### 3. Dimensions

Unit: mm





\*Housing Material: Black PBT

Tolerance: ±0.5mm Except Specified

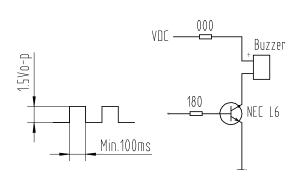


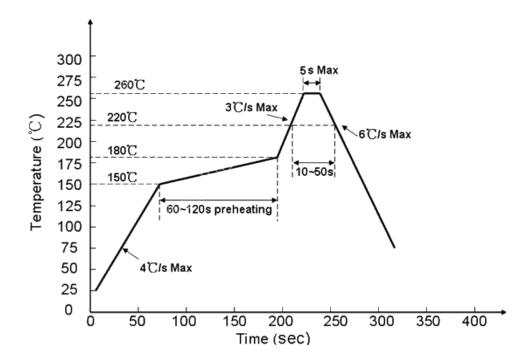
# 5. Electrical And Acoustical Measuring Condition

#### a) Recommended Setting

# Buzzer Mic. SPL Prequency

#### b) Recommended Test Circuit







#### 1. Product type: Electro-Magnetic Buzzer with built-in oscillating circuit (Pin Type)

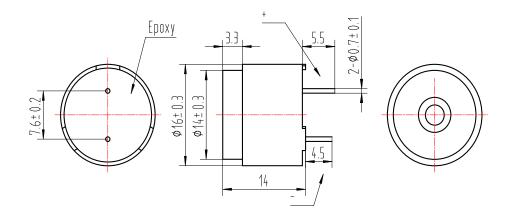
#### 2.Technical Parameter Measuring condition

Part shall be measured under a condition (Temperature:  $5 \sim 35^{\circ}$ C, Humidity:  $45\% \sim 85\%$ R.H., Atmospheric pressure:  $860 \sim 1060$ hPa) unless the standard condition (Temperature:  $25\pm3^{\circ}$ C, Humidity:  $60\pm10\%$ R.H. Atmospheric pressure:  $860 \sim 1060$ hPa) is regulated to measure

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1	Rated Voltage	6VDC	
2	Operating Voltage	4-8VDC	
3	Rated Current	Max.30mA, at 6VDC	
4	Sound Output at 10cm	Min.85dB, at 6VDC	
5	Resonant Frequency	2300±300 Hz	
6	Tone	Continuous	
7	Operating Temperature	-30 - +85℃	
8	Storage Temperature	-40 - +85℃	
9	RoHS	Yes	
10	Weight	Approx 5.0g	

#### 3. Dimensions

Unit: mm



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\*Housing Material: Black PPO

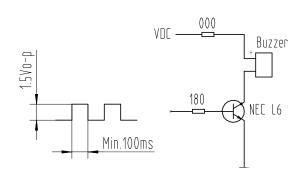


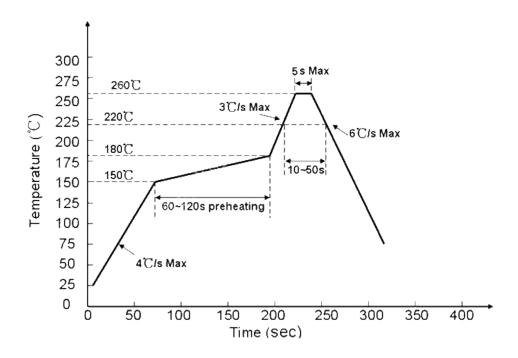
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Part shall be measured under a condition (Temperature:  $5 \sim 35^{\circ}$ C,

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Atmospheric pressure: 860  $\sim$  1060hPa) unless the standard

condition (Temperature: 25±3 °C,

Humidity:  $60\pm10\%$ R.H. Atmospheric pressure:  $860~\sim1060$ hPa) is

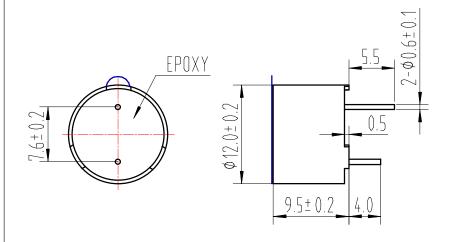
regulated to measure.



1	Rated Voltage	12VDC	
2	Operating Voltage	7-15VDC	
3	Rated Current	Max.30mA, at 12VDC	
4	Sound Output at 10cm	Min.90dB, at 12VDC	
5	Resonant Frequency	2300±300 Hz	
6	Tone	Continuous	
7	Operating Temperature	-20 - +70 °C	
8	Storage Temperature	-30 - +80 °C	
9	RoHS	Yes	
10	Weight	Approx 1.7g	

#### 3.Dimensions

Unit: mm





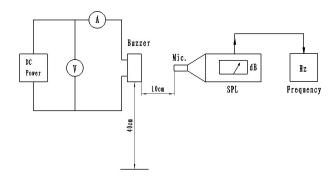
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Tolerance: ±0.5mm Except Specified

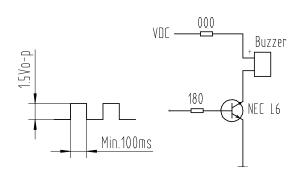


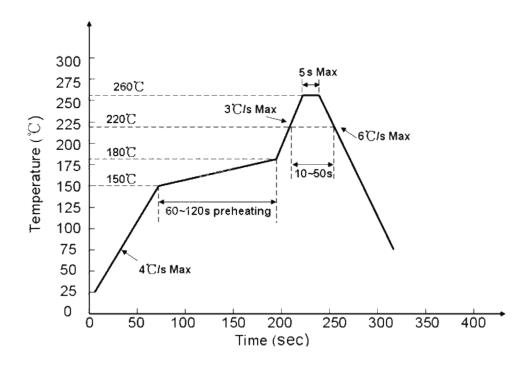
# **5. Electrical And Acoustical Measuring Condition**

#### a) Recommended Setting



#### b) Recommended Test Circuit







# 1. Product type: Electro-Magnetic Buzzer with built-in oscillating circuit (Pin Type)

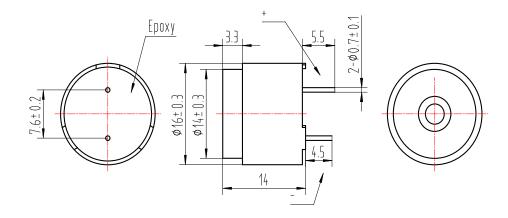
#### 2.Technical Parameter Measuring condition

Part shall be measured under a condition (Temperature:  $5 \sim 35^{\circ}$ C, Humidity: 45% ~ 85%R.H., Atmospheric pressure: 860 ~ 1060hPa) 60±10%R.H. Atmospheric pressure: 860 ~ 1060hPa) is regulated to measure

me	easure.		
1	Rated Voltage	12VDC	
2	Operating Voltage	8-15VDC	
3	Rated Current	Max.30mA, at 12VDC	
4	Sound Output at 10cm	Min.85dB, at 12VDC	
5	Resonant Frequency	2300±300 Hz	
6	Tone	Continuous	
7	Operating Temperature	-30 - +85℃	
8	Storage Temperature	-40 - +85℃	
9	RoHS	Yes	
10	Weight	Approx 5.0g	

#### 3. Dimensions

Unit: mm



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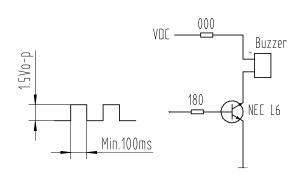


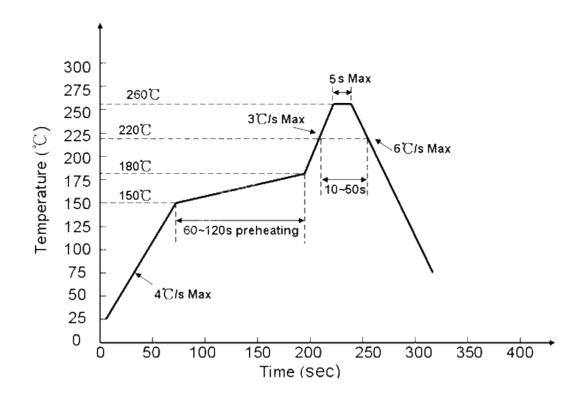
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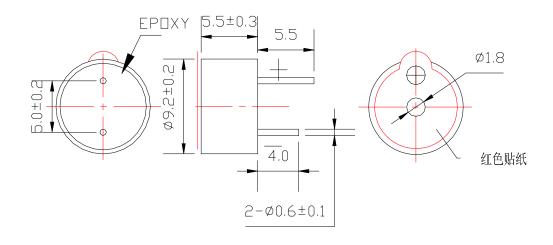
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1	Rated Voltage	3 VDC	
2	Operating Voltage	2-6VDC	
3	Rated Current	Max.30mA, at 3VDC	
4	Sound Output at 10cm	Min.80dB, at 3VDC	
5	Resonant Frequency	2800±300 Hz	
6	Tone	Continuous	
7	Operating Temperature	-20 - +70°C	
8	Storage Temperature	-30 - +80°C	
9	RoHS	Yes	
10	Weight	Approx 0.7g	

#### 3. Dimensions

Unit: mm

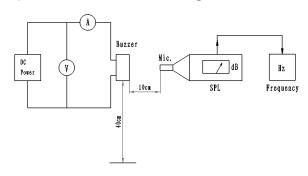


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