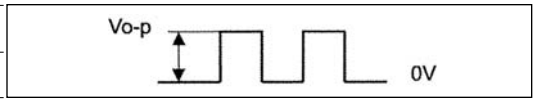
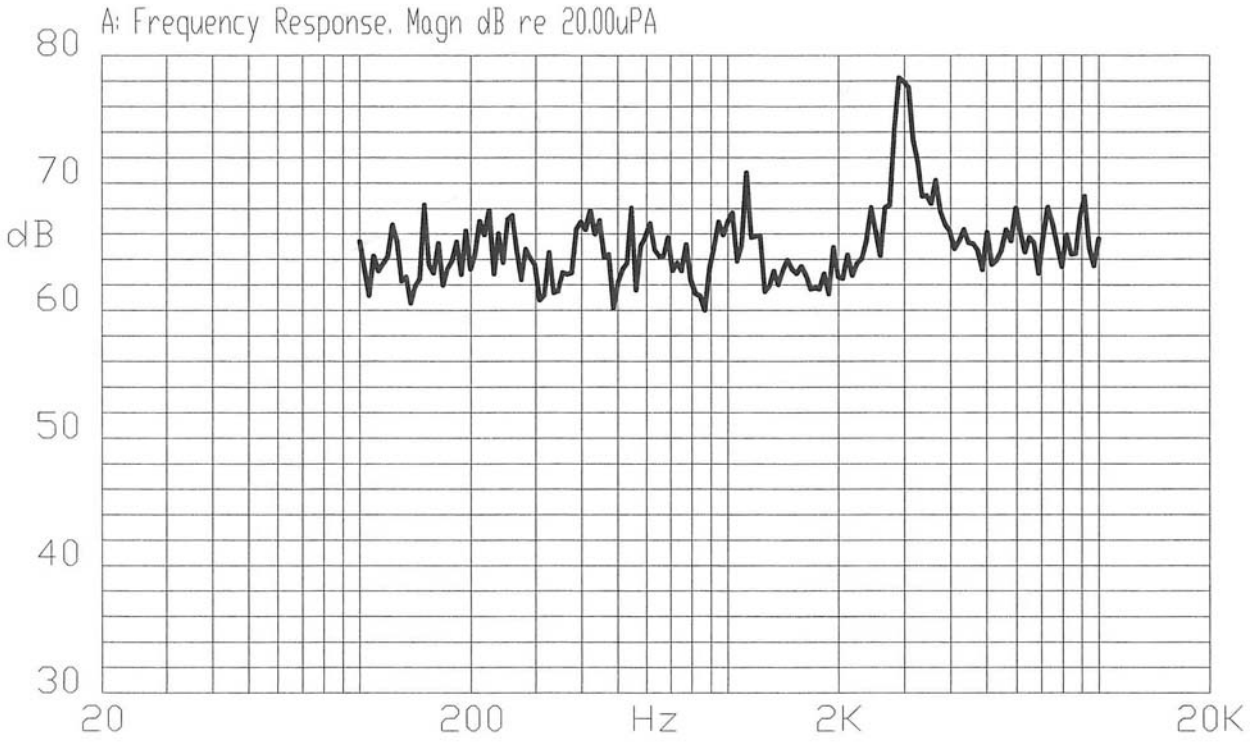
RoHS

Specifications

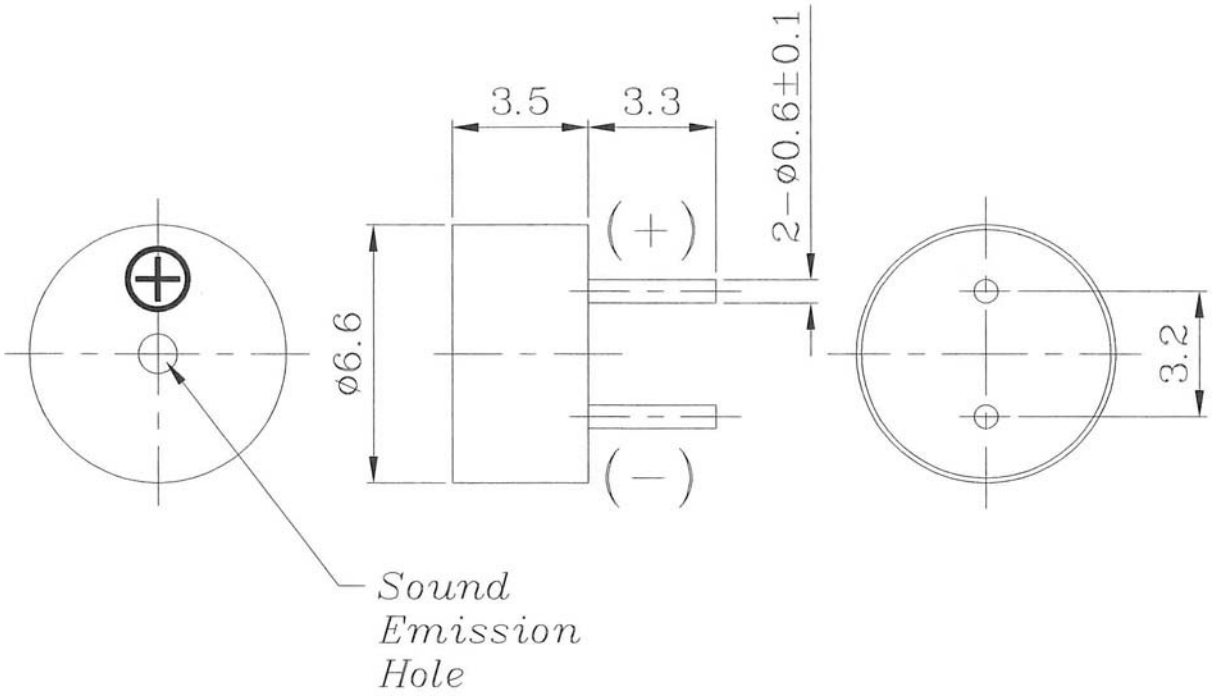
Rated voltage	1.5 Vo-p	
Operating voltage	1.0 - 1.7 Vo-p	
Mean current	80 mA max.	Applying rated voltage, 3000 Hz square wave, ½ duty
Coil resistance	6 ±1 Ω	
Coil impedance	8 Ω	
Sound output	Min. 70 (Typical 77) dBA	Distance at 10cm (A-weight free air). Applying rated voltage of 3000 Hz, square wave, ½ duty.
Rated frequency	3,000 Hz	
Operating tempurature	-20 ~ +60° C	
Storage tempurature	-30 ~ +70° C	
Dimensions	ø6.6 x H3.5 mm	See attached drawing
Weight	0.4 g	
Material	PPO (Black)	
Terminal	Pin type (Au Plating)	See attached drawing
RoHS	yes	

Frequency Response Curve

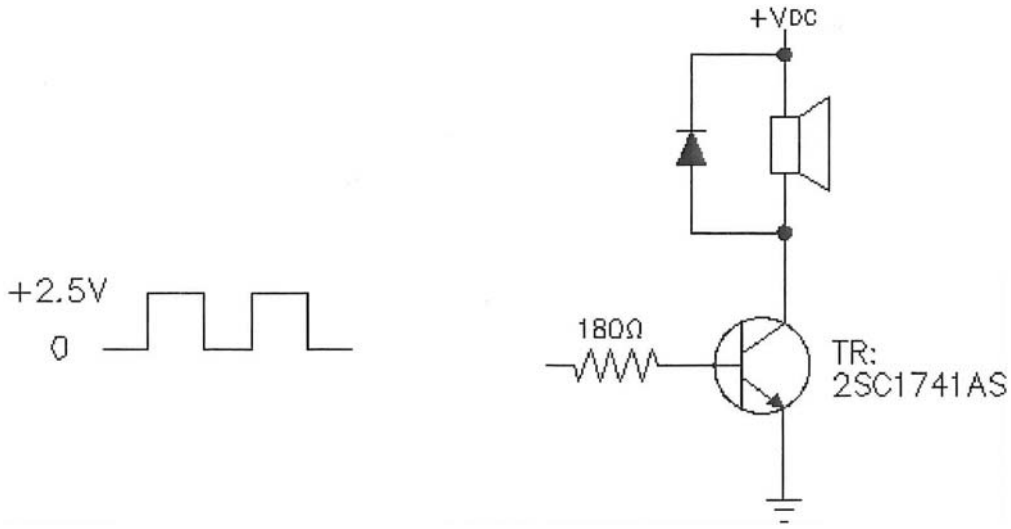


Appearance Drawing

Tolerance: ±0.5



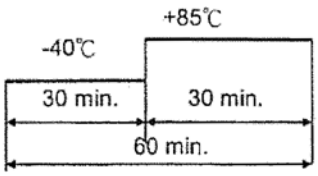
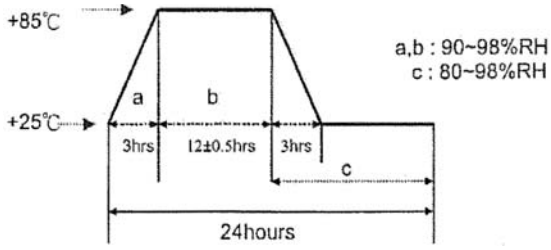
Measurement Method



Mechanical Characteristics

Item	Test Condition	Evaluation Standard
Solderability	Lead terminals are immersed in rosin for 5 seconds and then immersed in a solder bath of +270 ±5°C for 3 ±1 seconds.	90% min. of lead terminals should be covered with fresh solder. (Except the edge of the terminal.)
Soldering Heat Resistance	Lead terminals are immersed in solder bath of +260 ±5°C for 3 ±1 seconds.	No in interference in operation.
Terminal Mechanical Strength	The force of 9.8 N (1.0 kg) should be applied to the terminals.	No damage or cutting off.
Vibration	The buzzer will be measured after applying a vibration amplitude of 1.5 mm with 10 to 55 Hz band of vibration frequency to each of the 3 perpendicular directions for 2 hours (6 hours total).	After the test, the part should meet specifications without any damage to the appearance and the SPL should be within ±10 dBA of the initial measurement.
Drop Test	The part is to be dropped from a height of 75 cm onto a 40 mm thick wooden board 3 times in 3 axis (X, Y, Z) for a total of 9 drops.	

Environment Test

Item	Test Condition	Evaluation Standard
High temp. test	The part will be subjected to +70°C for 96 hours.	After the test, the part should meet specifications without any damage to the appearance or performance except SPL. After 4 hours at 25°C, the SPL should be within ±10 dBA of the initial measurement.
Low temp. test	The part will be subjected to -30°C for 96 hours	
Thermal shock	The part will be subjected to 10 cycles. One cycle will consist of: 	
Temp./Humidity cycle	The part shall be subjected to 10 cycles. One cycle will be 24 hours and consist of: 	

Reliability Tests

Item	Test Condition	Evaluation Standard
Operating (Life Test)	1. Continuous life test: The part will be subjected to 72 hours at 45°C with 1.5 V, 3000 Hz applied. 2. Intermittent life test: A duty cycle of 1 minute on, 1 minute off, a minimum of 10,000 times at room temp. (+25 ±10°C) with 1.5 V, 3000 Hz applied.	After the test, the part should meet specifications without any damage to the appearance or performance except SPL. After 4 hours at 25°C, the SPL should be within ±10 dBA of the initial measurement.

Test Conditions

Standard Test Condition	a) Tempurature: +5 ~ +35°C	b) Humidity: 45 - 85%	c) Pressure: 860 - 1060 mbar
Judgement Test Condition	a) Tempurature: +25±2°C	b) Humidity: 60 - 70%	c) Pressure: 860 - 1060 mbar

Packaging

Each minimum package of products will be in a carton box and it should be clearly marked with the Part Number, Quantity, and Outgoing Inspection Number. There should be no mechanical damage to the products during transportation and/or in storage.