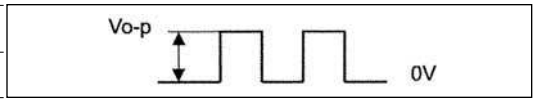
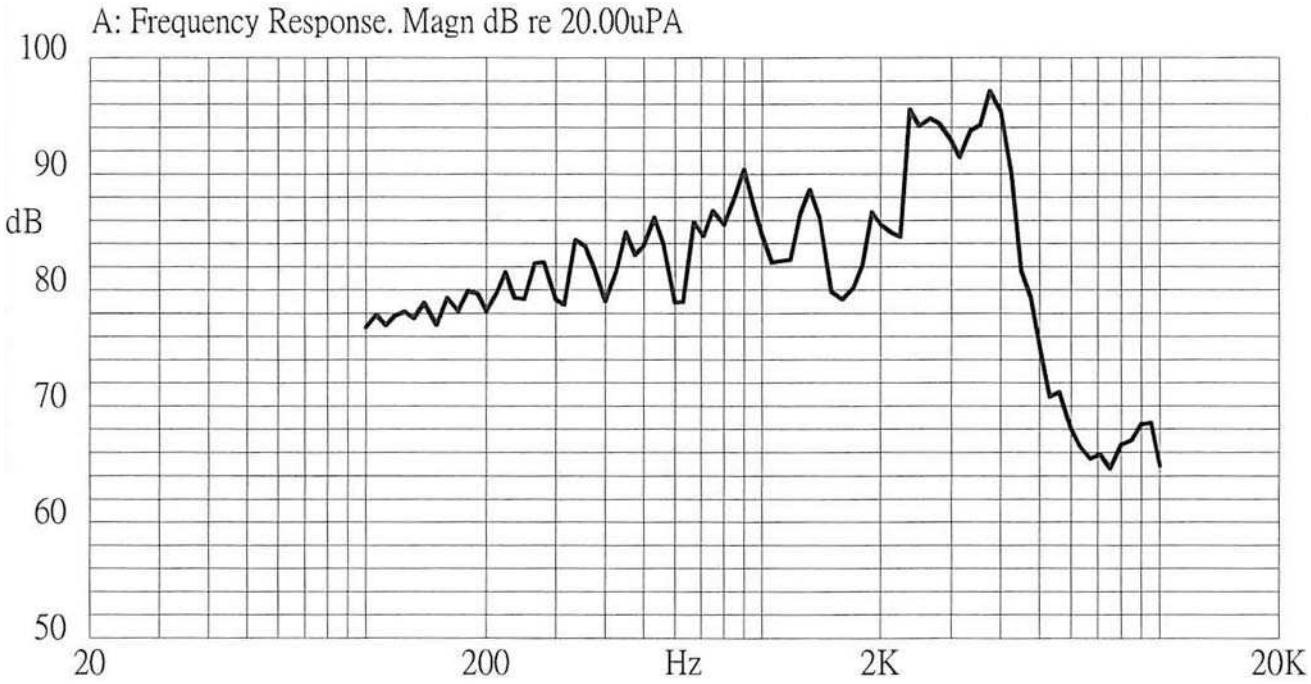
RoHS

Specifications

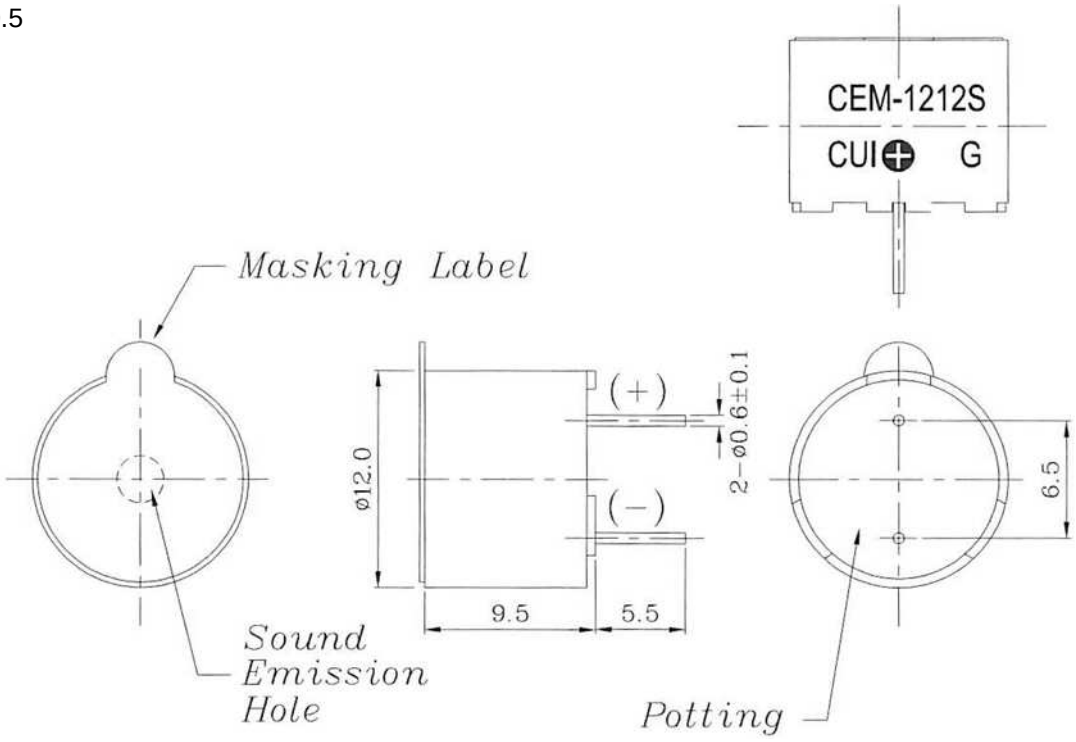
Rated voltage	12.0 Vo-p	
Operating voltage	6.0 - 16.0 Vo-p	
Mean current	40 mA max.	Applying rated voltage, 2400 Hz square wave, ½ duty
Coil resistance	140 ±21 Ohm	
Sound output	Min. 85 (Typical 92) dBA	Distance at 10cm (A-weight free air). Applying rated voltage of 2400 Hz, square wave, 1/2 duty.
Rated frequency	2,400 Hz	
Operating tempurature	-20 ~ +60°C	
Storage tempurature	-30 ~ +70°C	
Dimensions	ø12.0 x H9.5 mm	
Weight	1.6 g	
Material	PBT (Black)	
Terminal	Pin type (Au Plating)	
RoHS	yes	

Frequency Response Curve

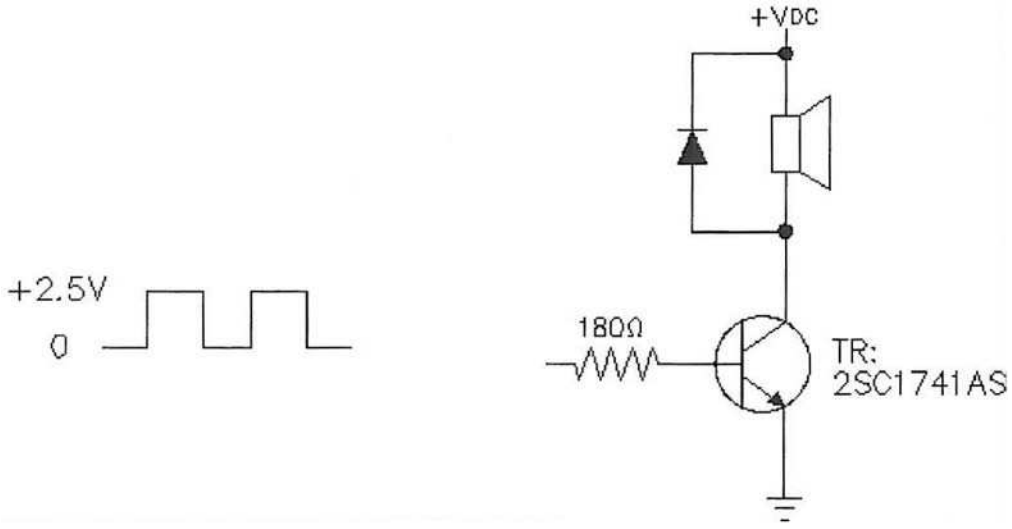


Appearance Drawing

Tolerance: ±0.5



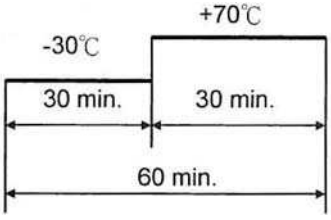
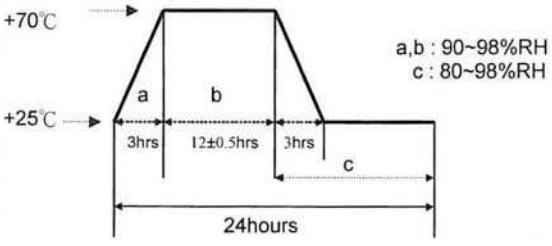
Measurement Method



Mechanical Characteristics

Item	Test Condition	Evaluation Standard
Solderability	Lead terminals are immersed in rosin for 5 seconds and then in a solder bath of +270 ±5℃ for 3 ±1 seconds.	90% min. of the lead terminals must be wet with fresh solder. (Except the edge of the terminal)
Soldering Heat Resistance	Lead terminals are immersed up to 1.5mm from the buzzer's body in a solder bath of +260 ±5℃ for 3 ±1 seconds.	No in interference in operation.
Terminal Mechanical Strength	The force of 9.8 N (1.0 kg) will be applied to each terminal in each axial direction for 10 seconds.	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.	After the test, the part will meet specifications without any damage to the appearance and the SPL should be within ±10 dBA of the initial SPL.
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℃ for 96 hours.	After the test, the part shall meet specifications without any damage to the appearance or performance and the SPL should be within ±10 dBA of the initial SPL.
Low temp. test	The part will be subjected to -30℃ 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 consist of: 	

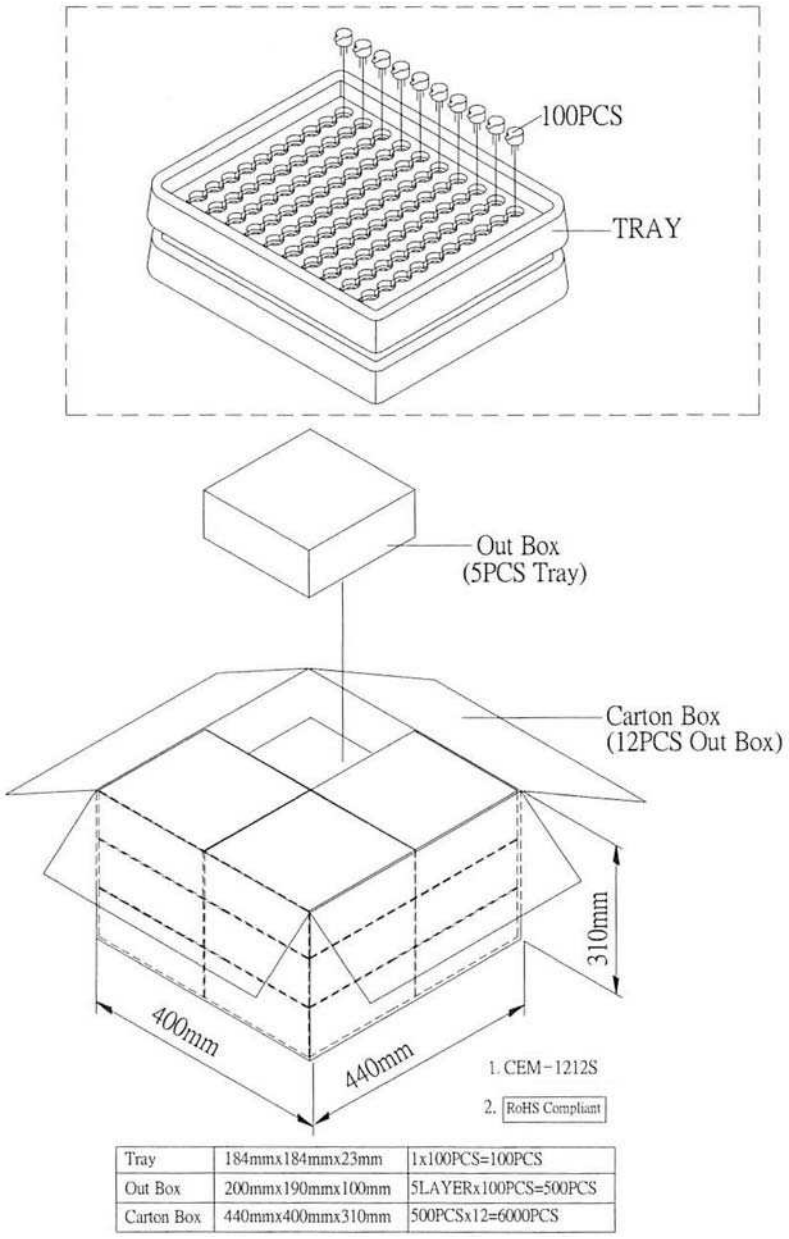
Reliability Tests

Item	Test Condition	Evaluation Standard
Operating (Life Test)	1. Continuous life test: The part will be subjected to 72 hours at +45℃ with 12 V, 2400 Hz applied. 2. Intermittent life test: A duty cycle of 1 minute on, 1 minutes off, a minimum of 10,000 times at room temp (+25±10℃) with 12 V, 2400 Hz applied.	After the test, the part shall meet specifications without any damage to the appearance. After 4 hours at +25℃, the SPL should be within ±10 dBA of the initial SPL.

Test Conditions

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

Packaging



Tray	184mmx184mmx23mm	1x100PCS=100PCS
Out Box	200mmx190mmx100mm	5LAYERx100PCS=500PCS
Carton Box	440mmx400mmx310mm	500PCSx12=6000PCS