
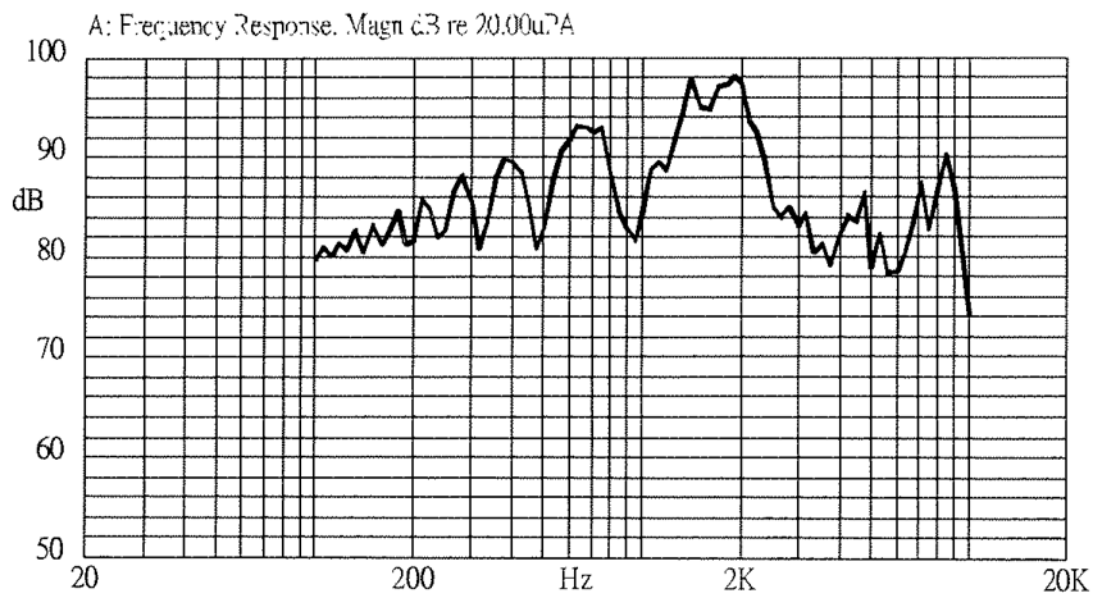
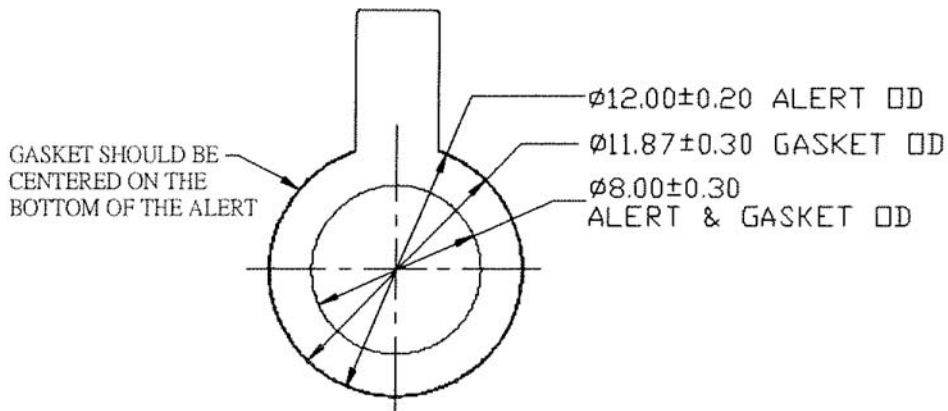
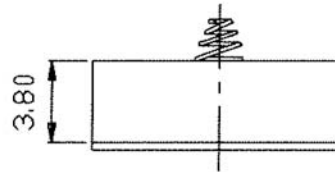
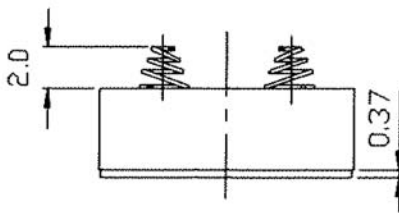
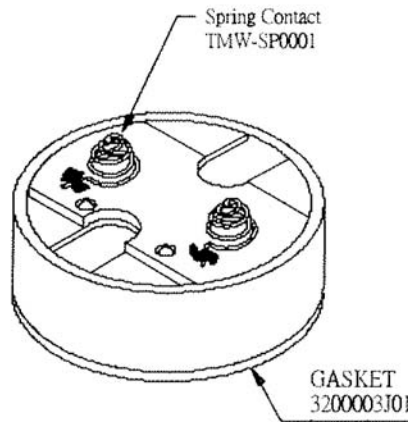
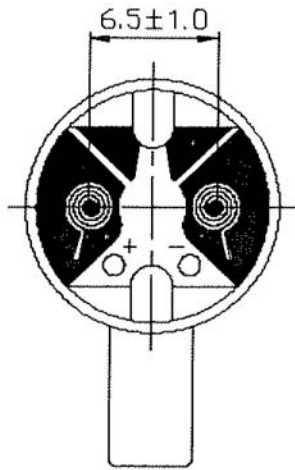


Specifications

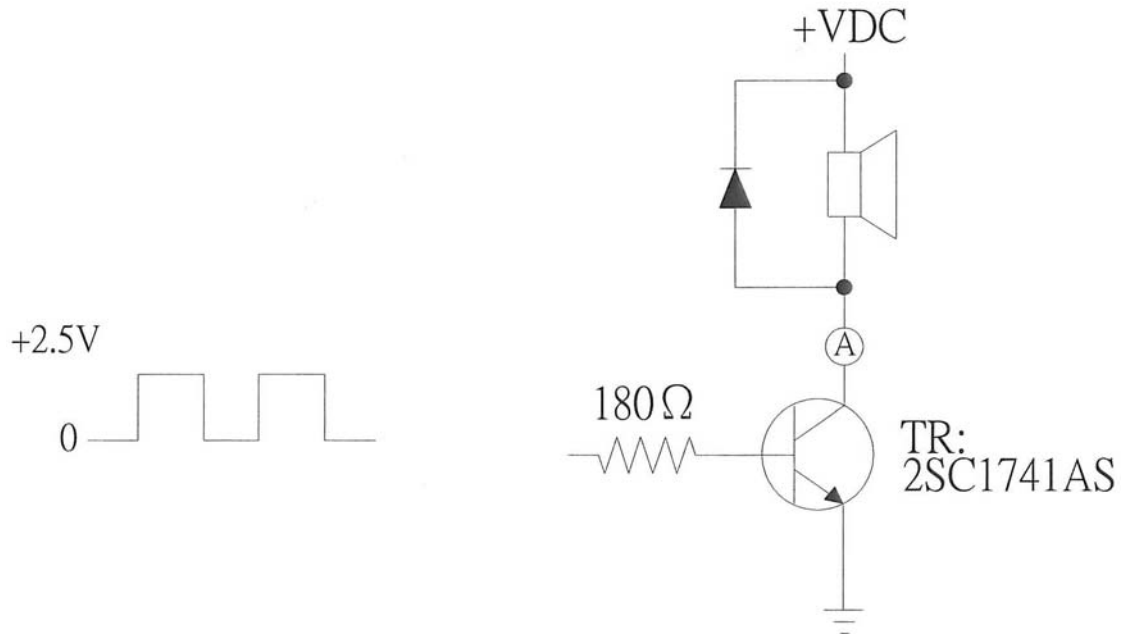
Rated voltage	3.0 Vo-p	
Operating voltage	1.0 ~ 3.0 Vo-p	
Mean current	90 mA max.	
Coil resistance	15.0 ±2.0 Ω	Applying rated voltage, 2000 Hz square wave, ½ duty
Coil impedance	42.5 Ω	
Sound output	Min. 90 (Typical 95) dBA	Distance at 5cm (A-weight free air). Applying rated voltage of 2000 Hz, square wave, ½ duty.
Rated frequency	2,000 Hz	
Operating temperature	-20 ~ +60° C	
Storage temperature	-30 ~ +70° C	
Dimensions	ø12.0 x H3.8 mm	See attached drawing
Weight	1.5 g	
Material	Noryl SE1-J	
RoHS	no	

Frequency Response Curve


Appearance Drawing

 Tolerance: ± 0.5


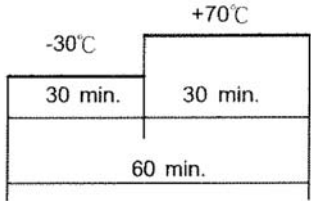
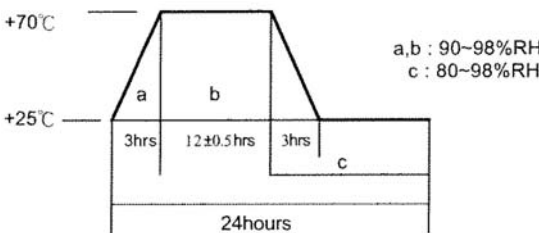
Measurement Method



Mechanical Characteristics

Item	Test Condition	Evaluation Standard
Vibration	The buzzer will be measured after applying a vibration amplitude of 1.52 mm (9.3G) with 10 to 55 to 10 Hz band of vibration frequency to each of the 3 perpendicular directions for 2 hours.	After the test, the part shall 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°C for 96 hours.	The buzzer will be measured after being placed at +25°C for 4 hours. There should be no degradation to the appearance or performance. The SPL should be 77dBA or more
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: <div style="text-align: center;">  </div>	
Temp./Humidity cycle	The part should be subjected to 10 cycles. One cycle will last for 24 hours and consist of: <div style="text-align: center;">  </div>	

Reliability Test

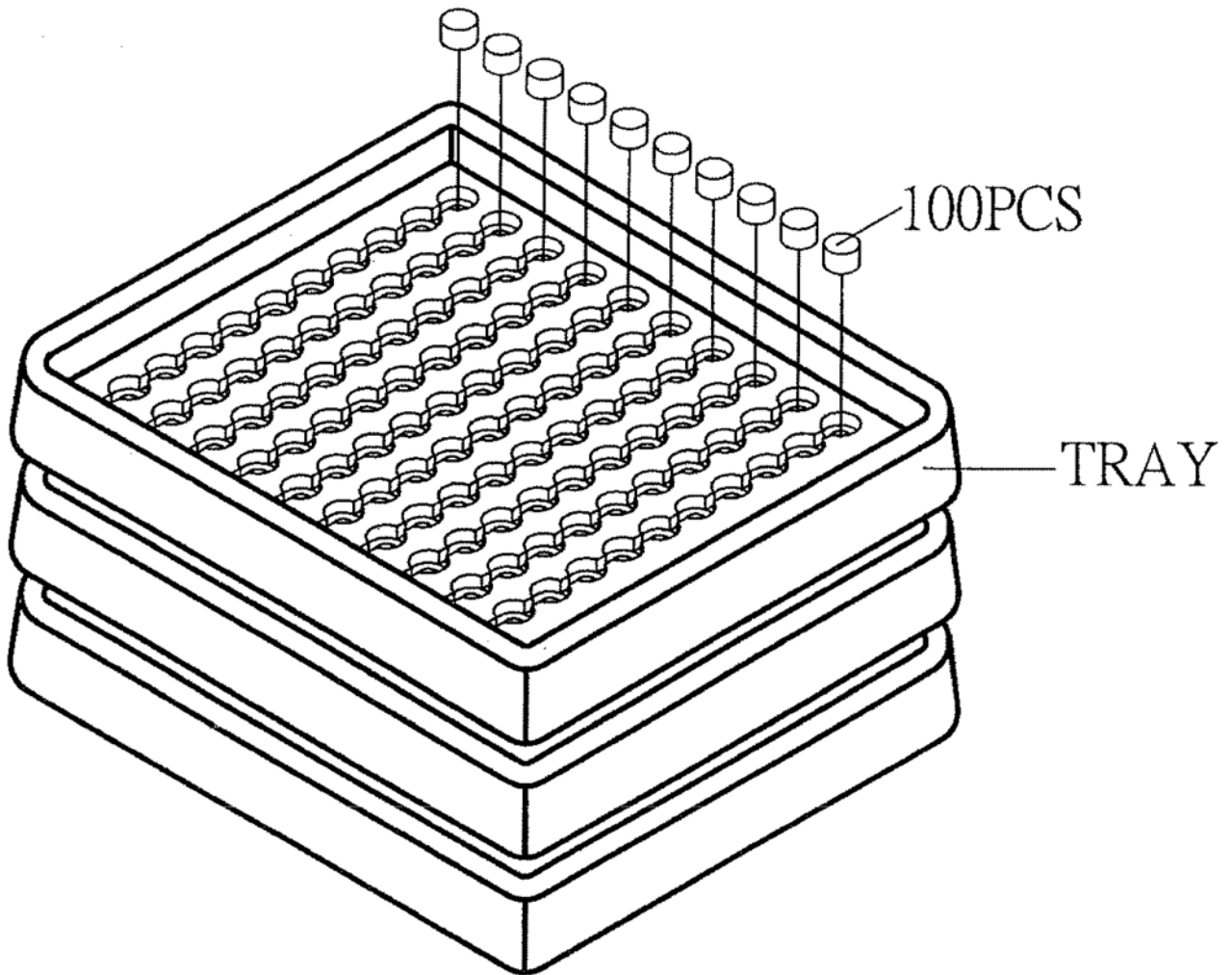
Item	Test Condition	Evaluation Standard
Operating (Life Test)	1. Ordinary temperature: The part will be subjected to 1000 hours at room temperature (+25±10°C) with 3.0 V, 2000 Hz applied. 2. High temperature: The part will be subjected to 500 hours at +60°C with 3.0 V, 2000 Hz applied. 3. Low temperature: The part will be subjected to 500 hours at -20°C with 3.0 V, 2000 Hz applied.	After the test, the part shall meet specifications without any damage to the appearance or performance. After 4 hours at +25°C, the SPL should be 77 dBA or more.

Test Conditions

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



Packaging



TRAY	184mmx184mmx24mm	1x100PCS=100PCS
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