



soberton inc.

WATERPROOF SPEAKER UNIT

Acoustic Product Specification

Product Number: WSP-3620Y



Release | Revision: A/2018

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Speaker Specification

Item	Specification
Rated Input Power	3.0 W
Max. Input Power	5.0 W
Mean Sound Pressure Level (S.P.L)	78±3dB (Input :1.0m/1.0W) Average @0.8, 1.0, 1.5, 2.0KHz (0dB SPL=20µPa)
Voice Coil Impedance	4Ω±10% (at 1.0 KHz, 1.0 V)
Lowest Resonance Frequency	220±20%Hz (at 2.0V)
Frequency Response	F0~20KHz (at -10dB)
Magnet	Φ15.0 x 5.5/12.5 x 2.5mm NdFeB
Operation	It shall be normal. Input power: 3.0 W
Noise	It shall be normal. Sine wave 3.5V
Polarity	When a positive DC current is applied to the terminal marked(+),the diaphragm moves forward.
Net Weight	28.6 grams
Dimensions:	Ø36.0 x H20.0mm Solder Pads
IP Rating	IP65

Reliability Test

Item	Method of Test
Load Test	Input power: 3.0W Duration: 96 hours White Noise
Humidity Test	Temperature: ±40°C Duration: 48 hours RH: 90 ~ 95%
High Temperature Test	Temperature: +55±2°C Duration: 16 hours
Low Temperature Test	Temperature: -25°C Duration: 96 hours
Thermal Shock Test	High Temperature: +60°C Low Temperature: -20°C Number of cycles: 5 cycles Duration of Exposure: 2 hours at each temp. Durations of Recovery: 1 hour
Vibration Test	Amplitude: 1.5 mm Frequency: 10 ~ 55 Hz Sweep time: 1 minute AXES: 3 axes Duration: 2 hours on each axes
Drop Test	Drop an unpacked unit onto a board of 15mm thick 5 times from a height of 75cm.
Terminal Strength	1kg-load for 15 sec, without resulting in any damage or rejection



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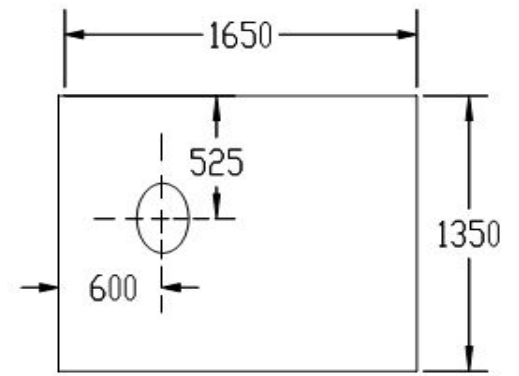
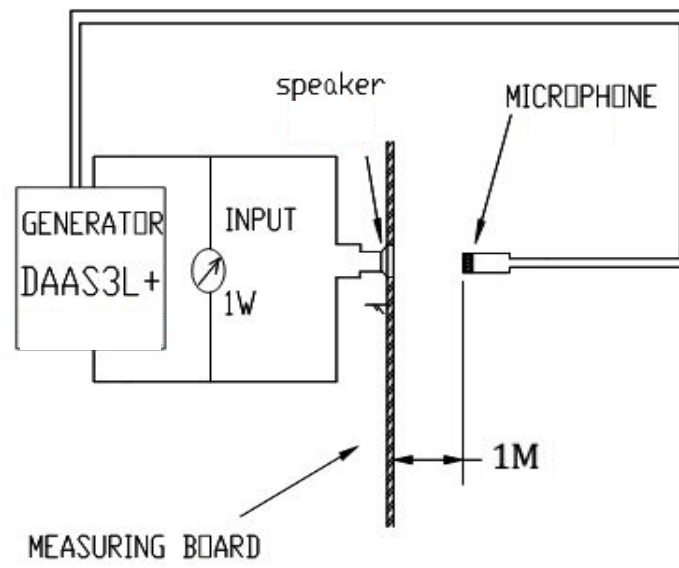
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MEASUREMENT

Typical Frequency Response Curve



Temperature Condition

Item	Method of Test
Operation Temperature Range	-20°C ~ +40°C
Storage Temperature Range	-25°C ~ +70°C



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Tolerance: $\pm 0.5\text{mm}$

