



soberton inc.

NB SPEAKER

Acoustic Product Specification

Product Number: SPM-2035NU



Release | Revision: A/2019

CONTENTS

This document contains the technical specifications for the NB speaker unit.

Page 1
General Specifications

Page 2
Standard Test Conditions
Test Conditions

Page 3
Reliability Tests

Page 4
Frequency Response Curve

Page 5
Dimensions

Page 6
Packing

General Specifications

Voice Coil Impedance

DC: $8 \pm 15\% \Omega$

Resonance Frequency

$1200 \pm 20\% \text{Hz @1V}$

Sound Pressure Level

$82 \pm 3\text{dB SPL @1.0 Watt, at 100 cm}$
Average @1.2, 1.5, 2.0, 2.5 KHz

Response Range

F0 ~ 10 KHz

Power Rating (Normal/ Maximum)

Normal: 2.0 Watt
Maximum: 2.5 Watt

Distortion

10% Max. at 1,000 Hz, 1.0 Watt, 0.1 Meter

Abnormal Sound Test

Result must be normal when tested at 4 volts in free air.

Magnet

Materials: NdFeB

Polarity

Diaphragm shall move forward when a positive DC current is applied to the "+" or "Marked" Terminal.

Environmental Protection Regulation

RoHS 2.0

Dimension

39.0x20.0xH8.2mm
WIRE 150mm + 3mm Jack

IP Level

None



soberton inc.

NB SPEAKER

Acoustic Product Specification

Product Number: SPM-2035NU



Release | Revision: A/2019

CONTENTS

This document contains the technical specifications for the NB speaker unit.

Page 1
General Specifications

Page 2
Standard Test Conditions
Test Conditions

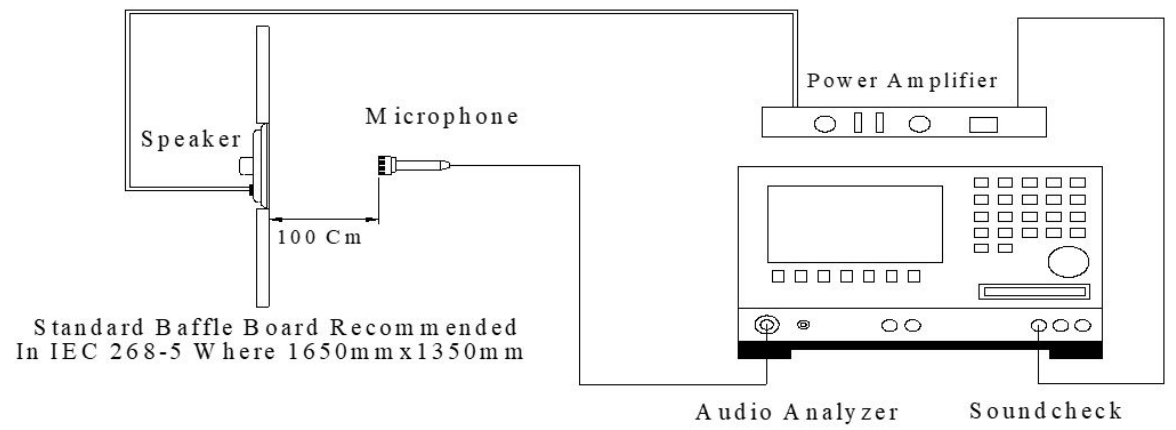
Page 3
Reliability Tests

Page 4
Frequency Response Curve

Page 5
Dimensions

Page 6
Packing

Standard Test Condition



Test Conditions

Standard Test Condition

Temperature 15~ 35°C

Relative humidity 45% ~ 85%

Atmospheric pressure 860~1060 mbar

Standard Test Fixture

Input power: 2.0W(4V)

Zero level: -dB

Mode: TSR

Potentiometer Range: 50dB

Sweep time: 0.5sec



soberton inc.

NB SPEAKER

Acoustic Product Specification

Product Number: SPM-2035NU



Release | Revision: A/2019

CONTENTS

This document contains the technical specifications for the NB speaker unit.

Page 1
General Specifications

Page 2
Standard Test Conditions
Test Conditions

Page 3
Reliability Tests

Page 4
Frequency Response Curve

Page 5
Dimensions

Page 6
Packing

Reliability Tests

The sound pressure as specified will neither deviate more than $\pm 3\text{dB}$ from the initial value, nor have any significant damage after any of following testing.

High Temperature Test

High Temperature $+60\pm 2^\circ\text{C}$

Duration 96 hours

Low Temperature Test

Low Temperature $-20\pm 2^\circ\text{C}$

Duration 96 hours

Heat Shock Test

High Temperature $+60\pm 2^\circ\text{C}$

Low Temperature $-20\pm 2^\circ\text{C}$

Changeover Time < 30 seconds

Duration 1 hour

Cycle 100

Humidity Test

Temperature $+40\pm 2^\circ\text{C}$

Relative Humidity 90%~95%

Duration 96 hours

Temperature Cycle Test

Temperature -20°C $+60^\circ\text{C}$

Duration 45 minutes 45 minutes

Temperature gradient $1\sim 3^\circ\text{C}/\text{min}$

Cycle 25

Drop Test

Mounted with dummy set mass In Normal Box

Height 75 cm

Cycle 10 (1 each plain) onto the concrete board

Load Test

White Noise (EIA Filter) for 96 hours @2.0W input power



soberton inc.

NB SPEAKER

Acoustic Product Specification

Product Number: SPM-2035NU



Release | Revision: A/2019

CONTENTS

This document contains the technical specifications for the NB speaker unit.

Page 1
General Specifications

Page 2
Standard Test Conditions
Test Conditions

Page 3
Reliability Tests

Page 4
Frequency Response Curve

Page 5
Dimensions

Page 6
Packing

Frequency Response Curve

Test condition: 1.0W/0.5M





soberton inc.

NB SPEAKER

Acoustic Product Specification

Product Number: SPM-2035NU



Release | Revision: A/2019

CONTENTS

This document contains the technical specifications for the NB speaker unit.

Page 1
General Specifications

Page 2
Standard Test Conditions
Test Conditions

Page 3
Reliability Tests

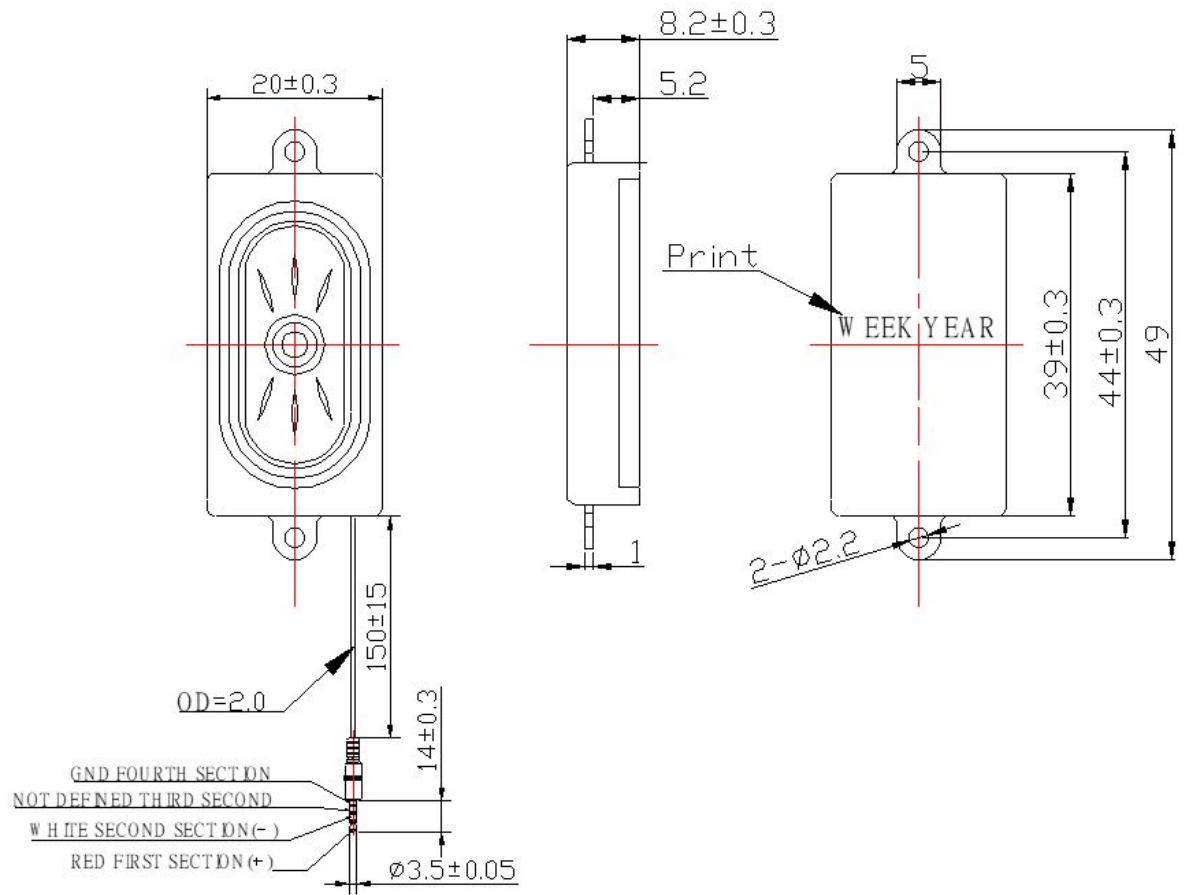
Page 4
Frequency Response Curve

Page 5
Dimensions

Page 6
Packing

Dimensions

Tolerance: ± 0.5 (unit: mm)



No.	Part Name	Material	Quantity
1	Diaphragm	Cloth	1
2	Voice Coil	Paper Cu	1
3	Plate	SPCC	1
4	Magnet	NdFeB	1
5	PCB Terminal	FR-4	1
6	Frame	PBT	1



soberton inc.

NB SPEAKER

Acoustic Product Specification

Product Number: SPM-2035NU



Release | Revision: A/2019

CONTENTS

This document contains the technical specifications for the NB speaker unit.

Page 1
General Specifications

Page 2
Standard Test Conditions
Test Conditions

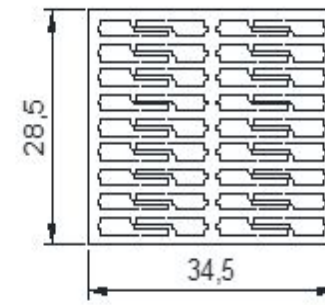
Page 3
Reliability Tests

Page 4
Frequency Response Curve

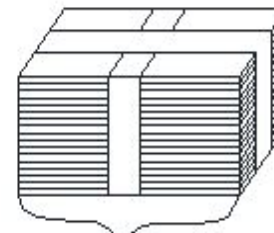
Page 5
Dimensions

Page 6
Packing

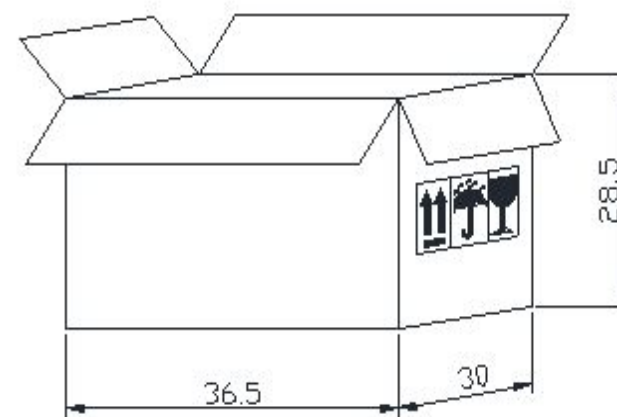
Packing



36pcs



540pcs



Packing Information

Unit: mm

Per Tray: 36 pcs

Per Carton: 15 trays

Total: 540 pcs per carton

Carton Size: 36.5 x 30 x 28.5cm