

# Loudspeaker Ø40x6.4 mm Waterproof

## CC40S064BN8GW

## Revision

Date	Version	Status	Changes	Approver
2017/12/05	V0.1	Draft	First release	LC

Specifications

#### **SPECIFICATIONS**

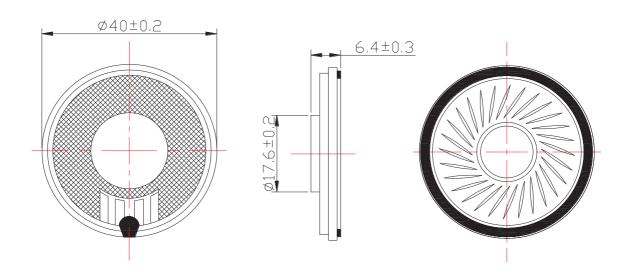
Parameter	Conditions/Description	Values	Units
Rated Input Power		2.0	W
Max Input Power		3.0	W
Rated Impedance	at 2.0 kHz	8±15%	Ω
Sound Pressure Level (S.P.L.)	at 1.0K 1.2K 1.5K 2.0K Hz in 0.1W/0.1M average (0dB SPL=20µPa)	89±3	dB
Resonant Frequency (Fo)	at 1.0 V	480±20%	Hz
Frequency Range	Output S.P.L10dB	Fo~10K	Hz
Distortion	at 1K Hz, input 0.1W,	< 5%	-
Magnet	NdFeB	Ф13.5*1.5	mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz	4.0	V
Polarity	cone will move forward with positive dc current to"+" terminal		
Weight			g
Operating Temperature		-20~+60	°C
Storage Temperature		-30~+70	°C
Waterproof Rating		IPX6	

Notes: All specifications measured at 5~35°C, humidity at 45~85%, under 86~106 kPa pressure, unless otherwise noted.

## **MECHANICAL DRAWING**

Units: mm

Tolerance: ±0.5mm



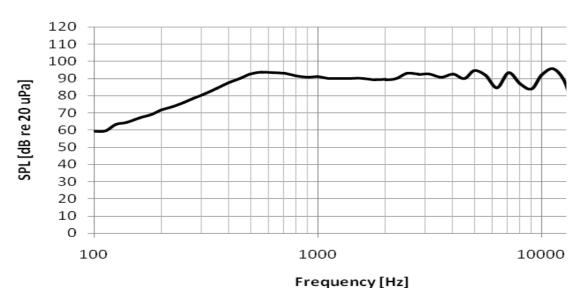
#### **CONSTRUCTION DETAIL**

PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	Gasket	1	ABS	
2	Diaphragm	1	PET	
3	VOICE COIL	1	Paper Cu	
4	Plate	1	SPCC	
5	Magnet	1	NdFeB	
6	PCB Terminal	1	FR4	
7	Frame	1	SPCC	

#### **RESPONSE CURVES**

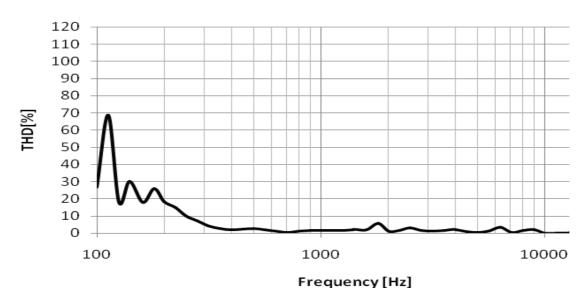
#### **Frequency Response Curve**

Test condition: 0.1W/0.1M,



#### **Total Harmonic Distortion Curve**

Test condition: 0.1W/0.1M,



Specifications

## **RELIABLITY TEST**

1	Reliability Test Performance	After any following test, parts should conform to original performance within ±3 dB tested with Rated Power, after 6 hours of recovery period.
2	High Temperature Test	96 hours at +70°C±3°C
3	Low Temperature Test	96 hours at -30°C±3°C
4	Humidity Test	96 hours at +30°C±3°C, 92-95% RH
5	Temp./Humidity Cycle	The part shall be subjected 5 cycles. One cycle shall be 6 hours and consist of $90 \sim 95 \% \text{ RH}$ $65^{\circ}\text{C}$ $9.5\text{hr}$ $65^{\circ}\text{C}$ $9.5\text{hr}$ $65^{\circ}\text{C}$
6	Vibration Test	Frequency: 10~55~10Hz Oct/min Amplitude: 1.5mm  Duration: 2 hours each of 3 perpendicular directions
7	Drop Test	Drop the speaker contained in normal box onto the surface of 40mm thick board 10 times from the height of 75cm
8	Operation Life Test	Must perform normal with program White-Noise source at Rated Power for 96 Hours
9	Termination Strength	Apply 3.0N(0.306kg) to each terminal in horizontal direction for 30 seconds; Apply 2.0N(0.204kg) to each terminal in vertical direction for 30 seconds;

#### **MEASURING METHOD**

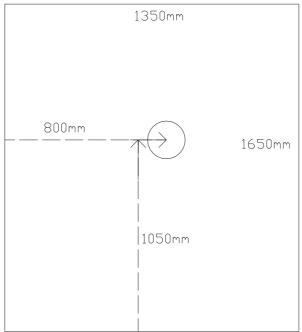
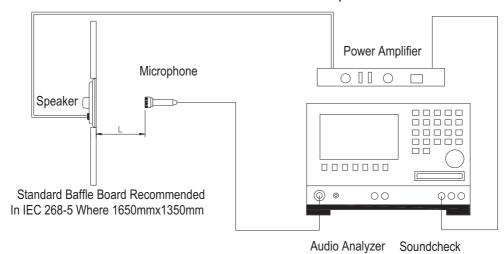


Fig. 1 Block Diagram for Measurement Method

## Standard test condition of speaker



L=10cm

Fig. 2 Speaker Test Condition

#### **PACKAGING**

units: cm

Remark:

25pcs per tray

20 trays for unit, 2 units per carton

Total: 1000 pcs per box

Size: 51.5\*34.5\*31cm

