



**Dynamic speaker
With mesh gasket & cable
and connector**

20×14 mm

CO2014L038BN8GMDAW

Revision

Date	Version	Status	Changes	Approver
2018/06/05	V0.1	Draft	Initial release	AX
2018/06/20	V0.2	Draft	Add weight and curve	AX
2018/07/12	V0.3	Draft	Modify waterproof level and drawing	AX
2018/08/07	V0.4	Draft	Modify SPL parameter	AX
2018/08/28	V0.5	Draft	Add tray size	AX
2020/06/10	V0.6	Draft	Add mark print&update gasket handle direction	AX

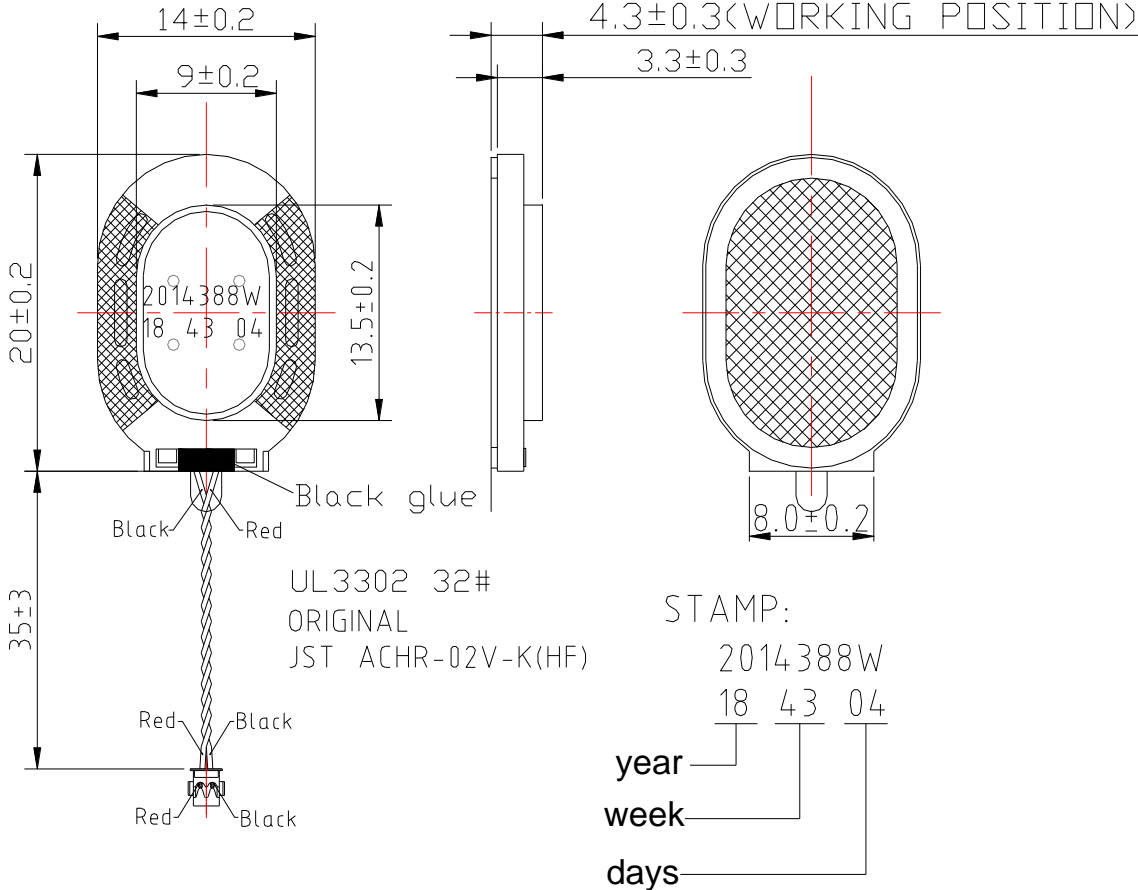
Specifications

Parameter	Conditions/Description	Values	Units
Rated Input Power		0.5	W
Max Input Power		1.0	W
Rated Impedance	at 2.0 kHz	8±15%	Ω
Sound Pressure Level (S.P.L.)	at 2.0KHz in0.5W/0.1M average (0dB SPL=20μPa)	93±3	dB
	at 2.0KHz in1.0W/0.1M average (0dB SPL=20μPa)	95±3	dB
Resonant Frequency (Fo)	at 1.0 V	800±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 1K Hz, input 0.1W,	< 10%	-
Magnet	NdFeB	F10*5.5*1.0	mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz	2.0	V
Polarity	cone will move forward with positive dc current to“+” terminal		
Weight		1.7	g
Operating Temperature		-20~+60	°C
Storage Temperature		-30~+70	°C
Waterproof		IP65	

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







MECHANICAL DRAWING

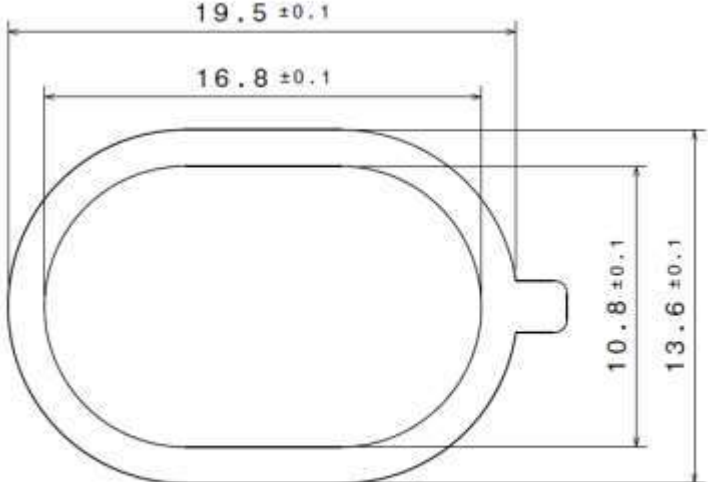
Units: mm
Tolerance: ±0.5mm



CONSTRUCTION DETAIL

PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	Cap	1	Sus304C	
2	Diaphragm	1	Pen	
3	VOICE COIL	1	Cu	
4	Plate	1	SPCC	
5	Magnet	1	NdFeB	
6	PCB Terminal	1	FR4	
7	Frame	1	PBT	

-  Removable pull-tab
-  Adhesive : 0.05mm
-  Acoustic mesh : 0.1mm
-  Adhesive : 0.05mm
-  Foam : 0.7 mm
-  Adhesive : 0.05mm



GASKET 14X20MDA

RESPONSE CURVES

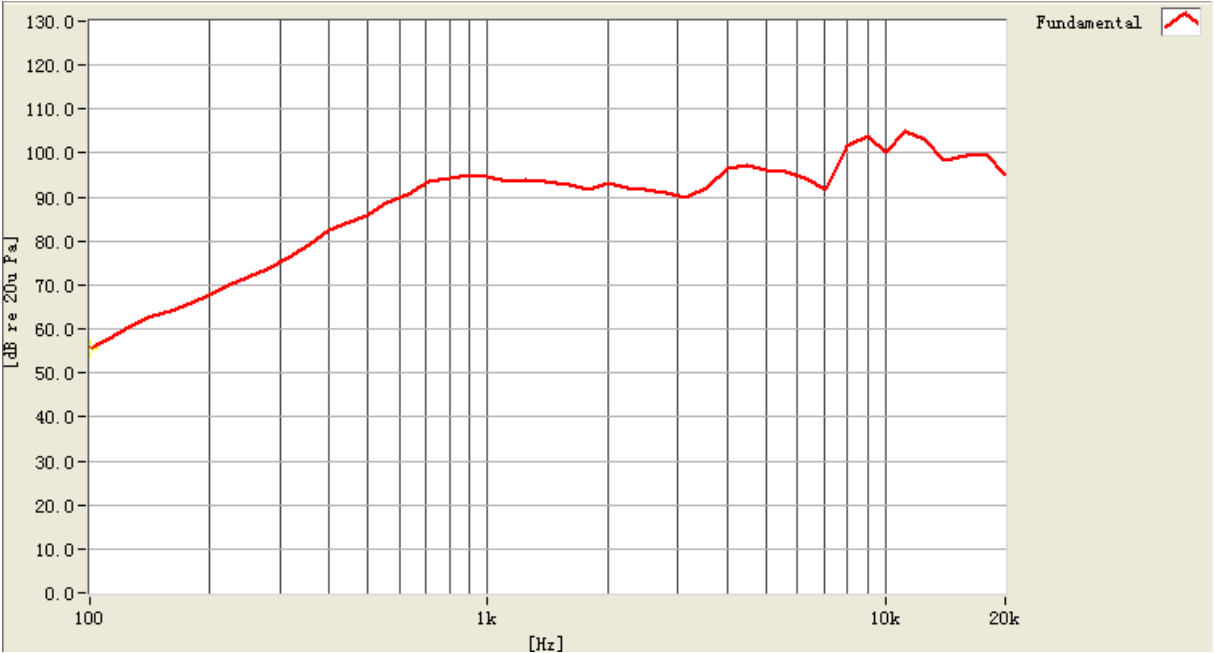
Frequency Response Curve

Test condition: 0.5W/0.1M,



Frequency Response Curve

Test condition: 1.0W/0.1M,



RELIABILITY 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 $+70^{\circ}\text{C} \pm 3^{\circ}\text{C}$
3	Low Temperature Test	96 hours at $-30^{\circ}\text{C} \pm 3^{\circ}\text{C}$
4	Humidity Test	96 hours at $+30^{\circ}\text{C} \pm 3^{\circ}\text{C}$, 92-95% RH
5	Temp./Humidity Cycle	<p>The part shall be subjected 5 cycles. One cycle shall be 6 hours and consist of</p>
6	Vibration Test	<p>Frequency: 10~55~10Hz Oct/min Amplitude: 1.5mm</p> <p>Duration: 2 hours each of 3 perpendicular directions</p>
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	<p>Apply 3.0N(0.306kg) to each terminal in horizontal direction for 30 seconds;</p> <p>Apply 2.0N(0.204kg) to each terminal in vertical direction for 30 seconds;</p>

MEASURING METHOD

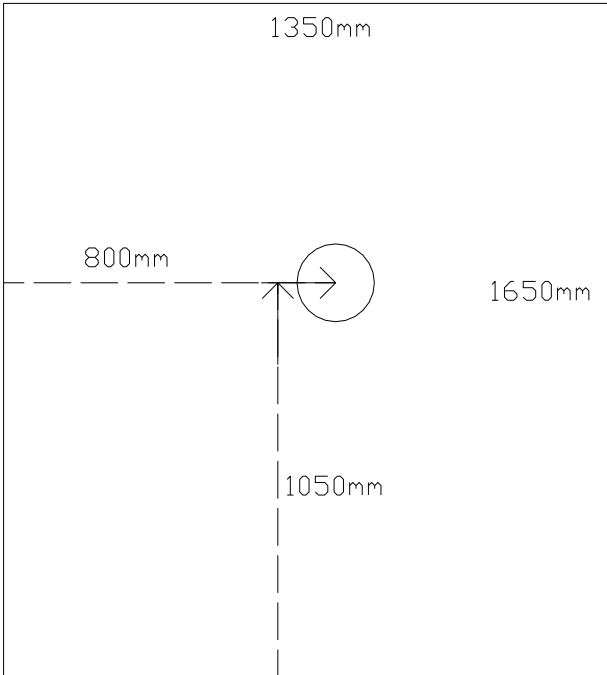
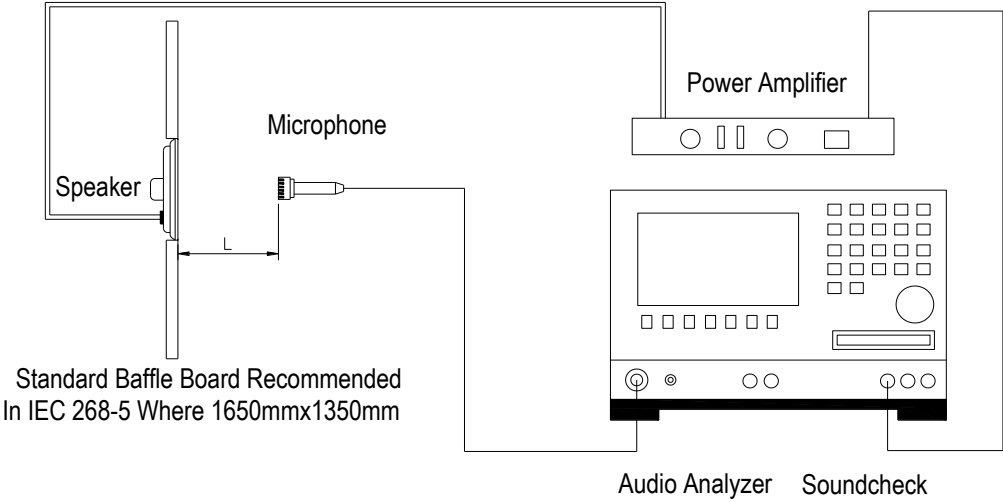


Fig. 1 Block Diagram for Measurement Method

Standard test condition of speaker



L=10cm

Fig. 2 Speaker Test Condition

PACKAGING

units: cm
Remark:

100pcs per tray

10 trays for unit, 2 units per carton

Total:2000 pcs per box

Size:51.5*33*21.5cm

