



Dynamic loudspeaker

40 × 20 mm

With wires

CC40W183AN4

Revision

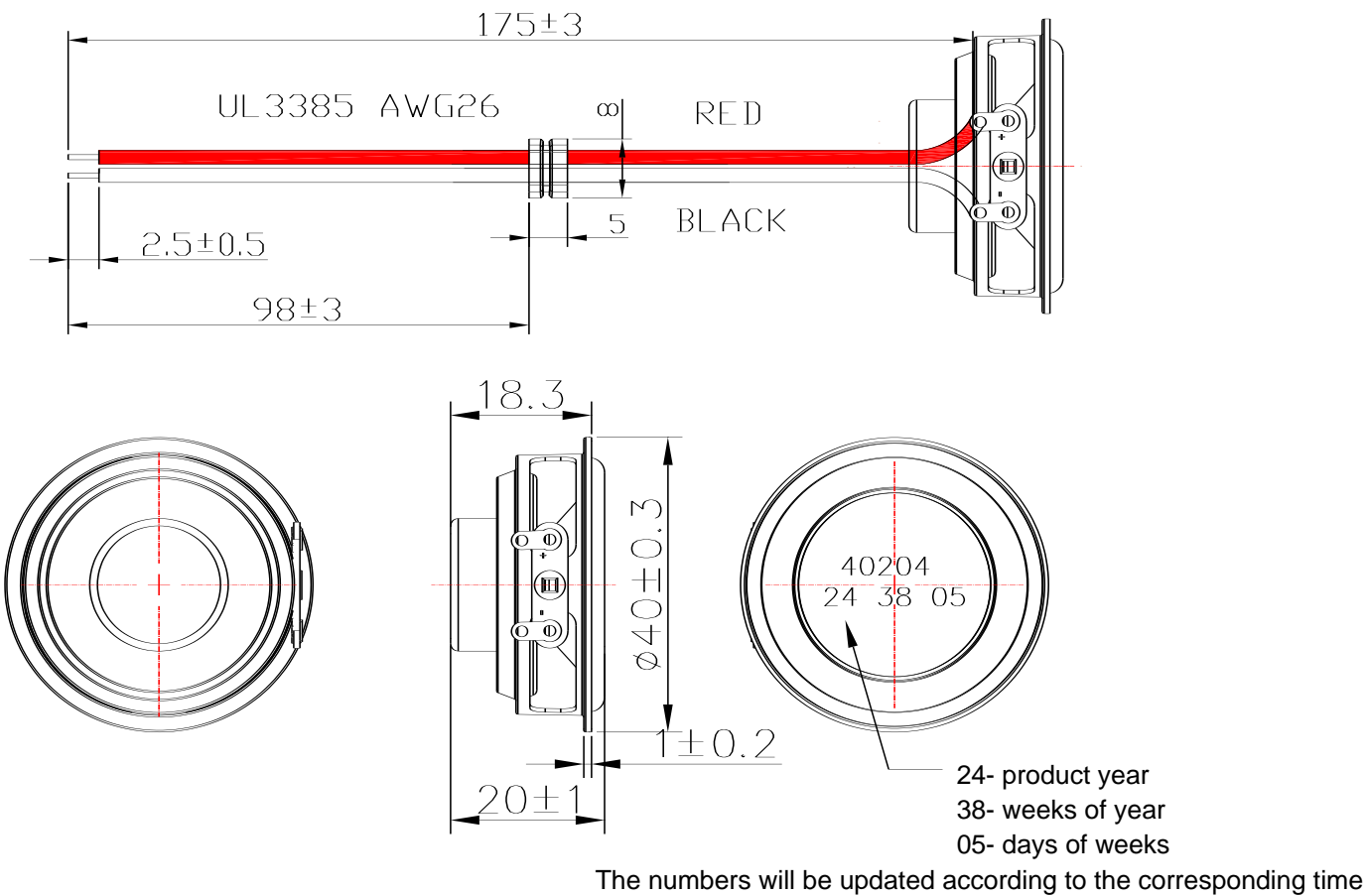
Date	Version	Status	Changes	Approver
2024/9/13	V0.1	Draft	First release	AX
2024/9/26	V0.2	Draft	add print code & construction section	AX

Parameter	Conditions/Description	Values	Units
Rated Input Power		1.0	W
Max Input Power		2.0	W
Rated Impedance		4±15%	Ω
Sound Pressure Level (S.P.L.)	at 1.0K Hz in1.0W/1.0m Baffle (0dB SPL=20μPa)	79±3	dB
Resonant Frequency (F0)	at 1.0V free field	230±20%	Hz
Frequency Range	Output S.P.L. -10dB	F0~20K	Hz
Distortion	at 1K Hz, input1W/1M,	< 5%	-
Magnet	NdFeB	Φ12.5*2.0	mm
Buzz, Rattle, etc.	must be normal at sine wave between 100 ~ 4K Hz	2.0	V
Polarity	cone will move forward with positive dc current to“+” terminal		
Weight		20	g
Operating Temperature		-20~+60	°C
Storage Temperature		-20~+60	°C

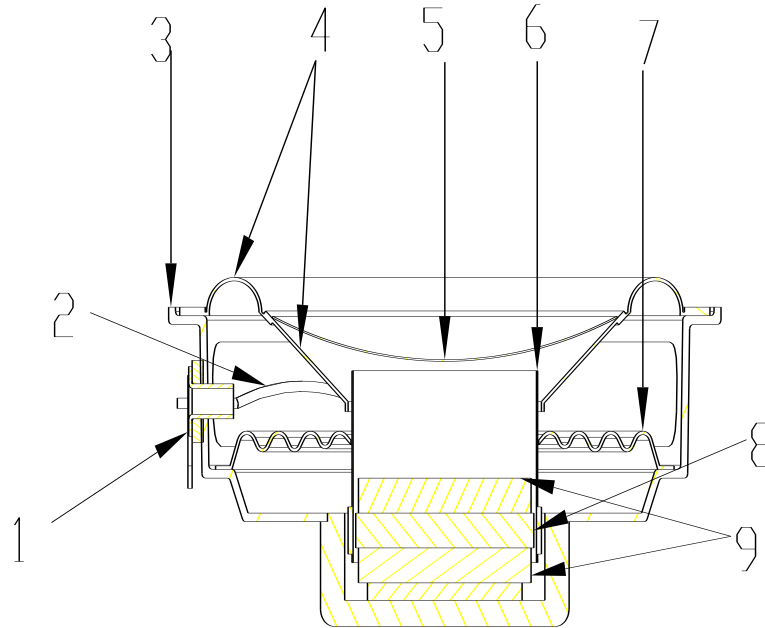
Notes: All specifications measured at 5~35°C, humidity at 45~85%, under 86~106 kPa pressure, unless otherwise noted.

MECHANICAL DRAWING

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



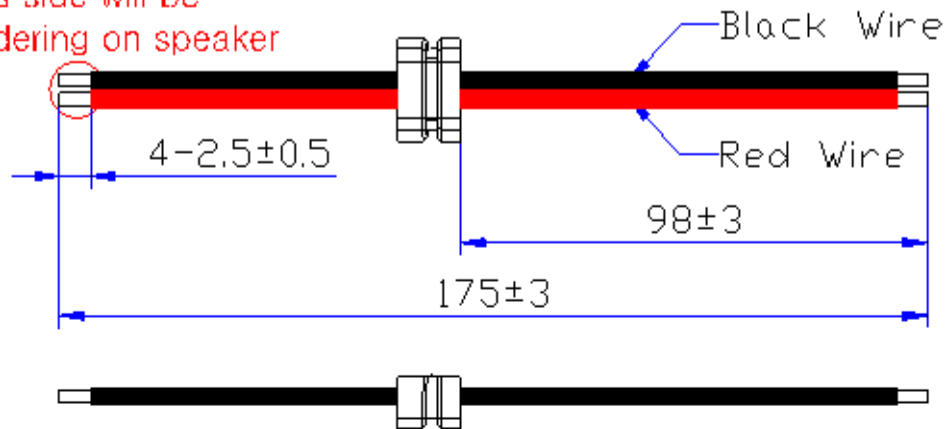
CONSTRUCTION SECTION



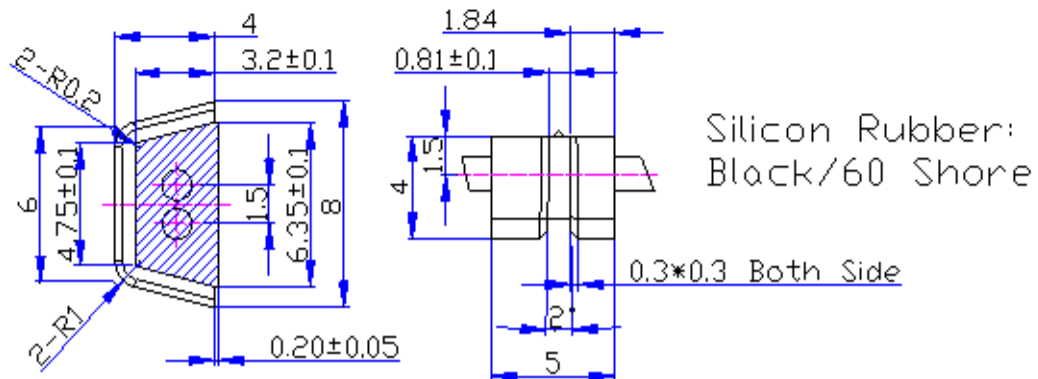
CONSTRUCTION DETAIL

PART NO.	PART NAME	Q'TY	MATERIAL	REMARK
1	PCB Terminal	1	Paper+metal	
2	Lead wire	1	Cu	
3	Frame	1	Spcc	
4	Diaphragm	1	Paper+NBR	
5	Dust cap	1	PET	
6	VOICE COIL	1	Cu	
7	Spider	1	cloth	
8	Plate	1	SPCC	
9	Magnet	1	NdFeB	

This side will be
soldering on speaker



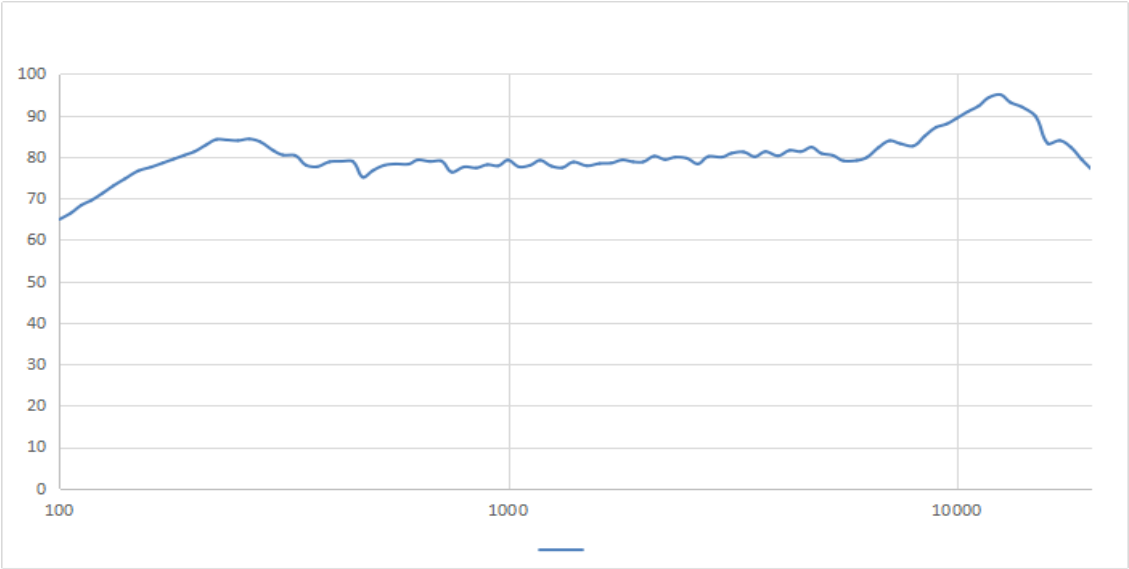
UL3385-AWG26
stranded tinned copper: $7/0.16\text{mm}$
Insulation: PVC free compliant



RESPONSE CURVES

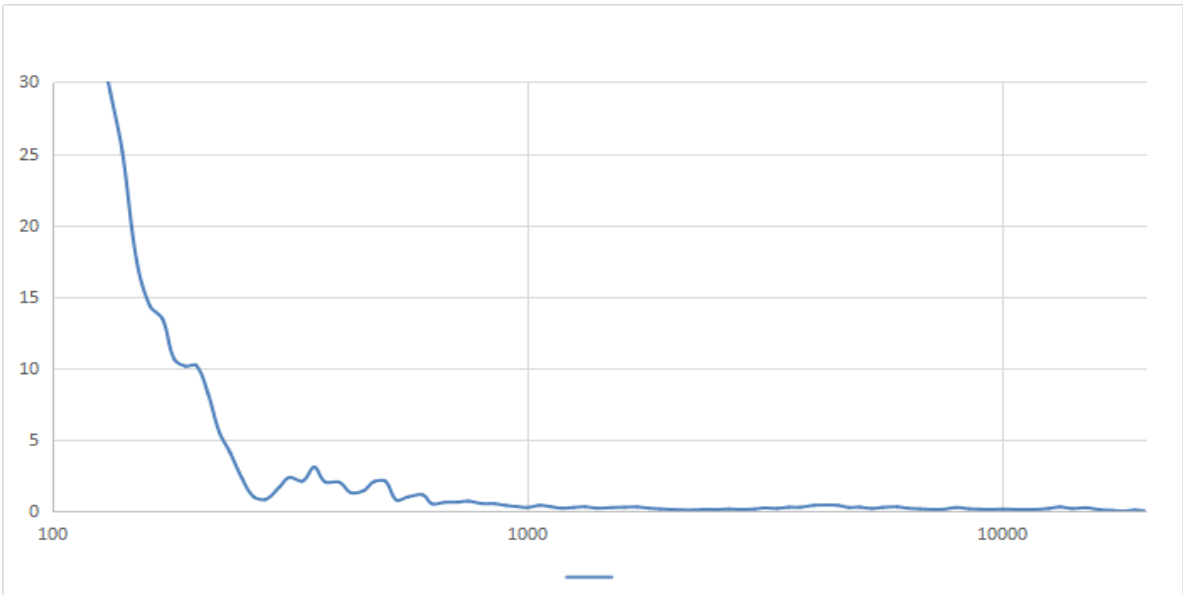
Frequency Response Curve

Test condition: 1W/1M,



Total Harmonic Distortion Curve

Test condition: 1W/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 $+60^{\circ}\text{C} \pm 3^{\circ}\text{C}$
3	Low Temperature Test	96 hours at $-20^{\circ}\text{C} \pm 3^{\circ}\text{C}$
4	Humidity Test	96 hours at $+40^{\circ}\text{C} \pm 3^{\circ}\text{C}$, 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> <p>90 ~ 95 % RH</p> <p>65°C</p> <p>25°C</p> <p>0.5hr 6hrs 0.5hr</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

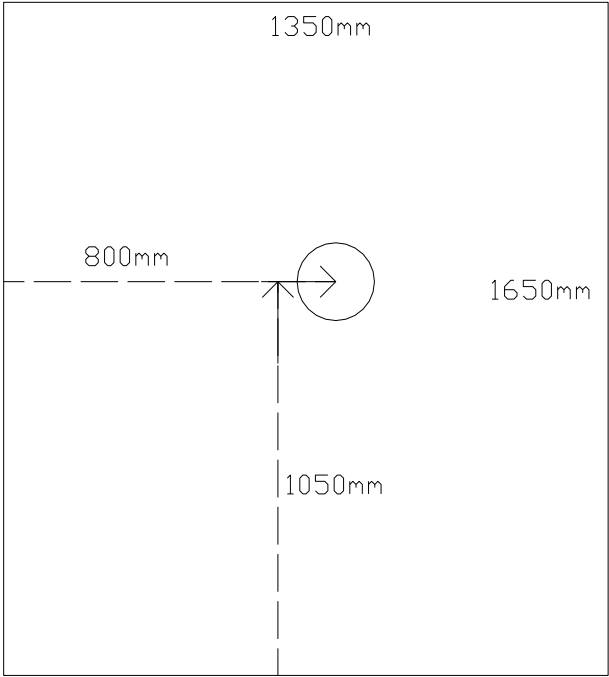


Fig. 1 Block Diagram for Measurement Method

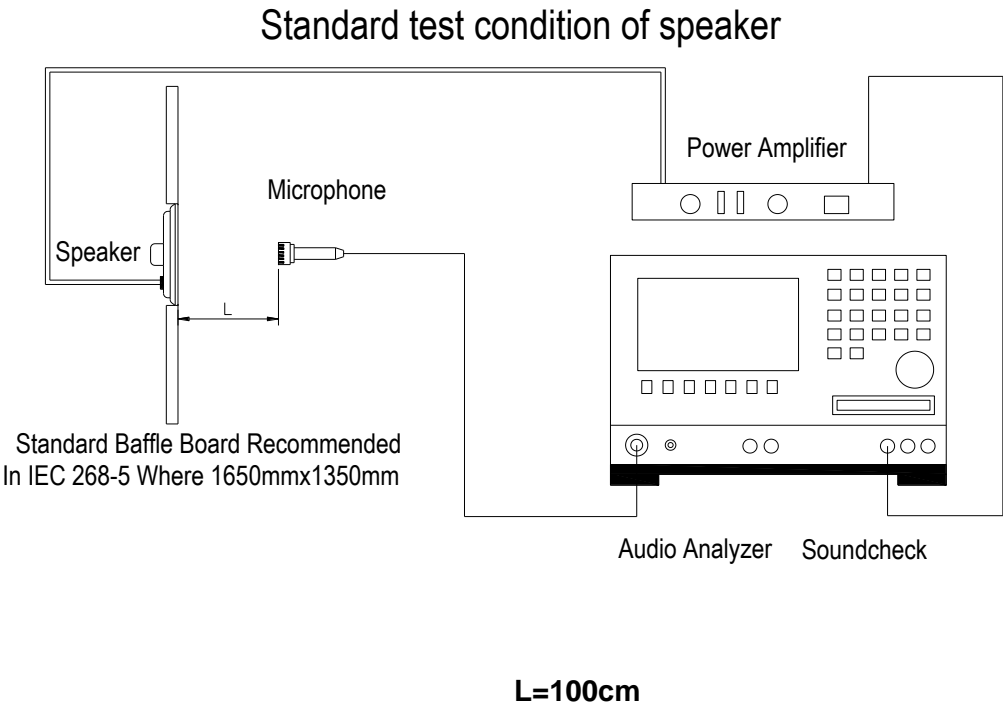


Fig. 2 Speaker Test Condition

PACKAGING

units: mm

Remark:

50 pcs per tray

7 units per carton

Total:350 pcs per box

Size:52.8*29.6*26cm

