Loudspeaker

Ø53×30 mm

CO53S30DN8

Revision

Date	Version	Status	Changes	Approver
2018/10/15	V0.1	Draft	First release	AX

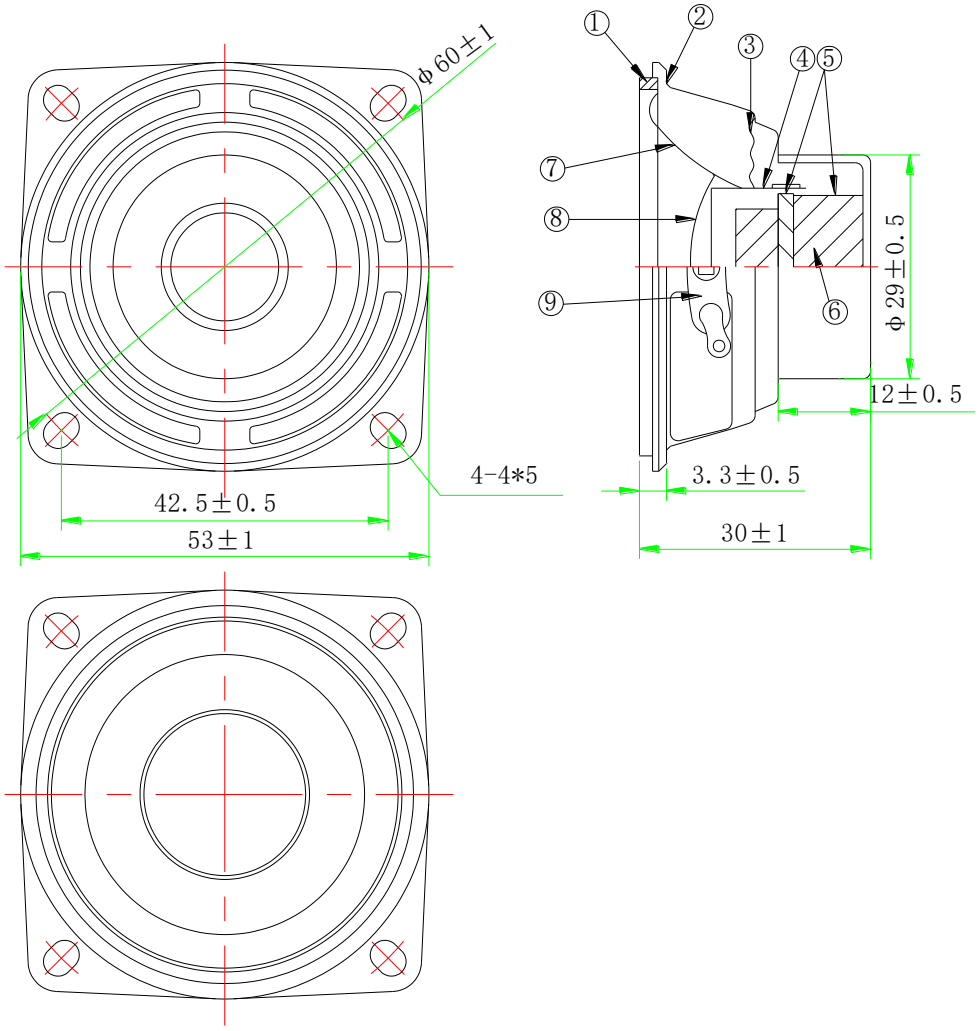
Parameter	Conditions/Description	Values	Units
Rated Input Power		10.0	W
Max Input Power		15.0	W
Rated Impedance	at 2.0 kHz	8±15%	Ω
Sound Pressure Level (S.P.L.)	at 0.8K 1.0K 1.2K 1.5KHz in0.1W/0.1M average (0dB SPL=20μPa)	91±3	dB
Resonant Frequency (Fo)	at 1.0 V	180±20%	Hz
Frequency Range	Output S.P.L. -10dB	Fo~20K	Hz
Distortion	at 1K Hz, input 1.0W,	< 5%	-
Magnet	NdFeB	Φ18.5*5.5	mm
Buzz, Rattle, etc.	must be normal at sine wave between Fo ~ 5K Hz	8.9	V
Polarity	cone will move forward with positive dc current to“+” terminal		
Weight		75	g
Operating Temperature		-20~+60	℃
Storage Temperature		-30~+70	℃
Waterproof Rating		N/A	

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



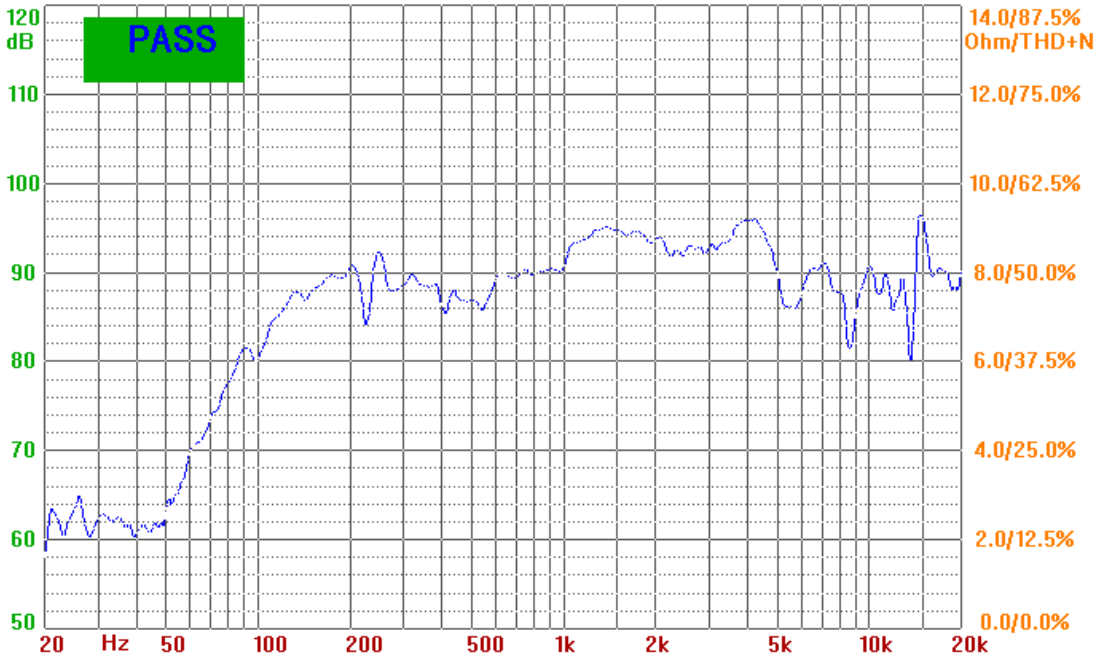
CONSTRUCTION DETAIL

NO	零件 Component	材质 Material
1	压边 Gasket	泡沫 Foam
2	盆架 Frame	冷轧钢板 SPCC
3	弹波 Damper	布 Cloth
4	音圈 Voice coil	胶管+铜 KSV+Cu
5	磁铁 Magnet	汝铁硼 NdFeB
6	极片 Plate	冷轧钢板 SPCC
7	鼓纸 Cone	PU 边纸盆 PU+Paper
8	帽子 Dust cap	纸 Paper
9	接线板 Terminals	纸板+铁 Paper+steel

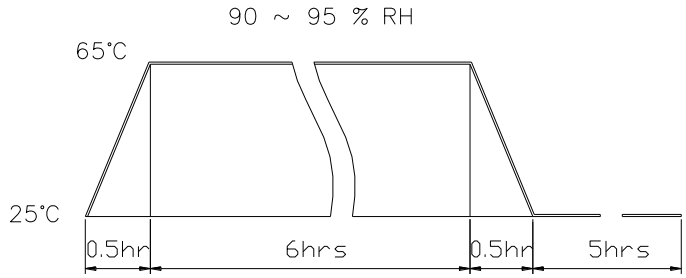
RESPONSE CURVES

Frequency Response Curve

Test condition: 0.1W/0.1M,



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℃±3℃
3	Low Temperature Test	96 hours at -30℃±3℃
4	Humidity Test	96 hours at +30℃±3℃, 92-95% RH
5	Temp./Humidity Cycle	The part shall be subjected 5 cycles. One cycle shall be 6 hours and consist of 
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

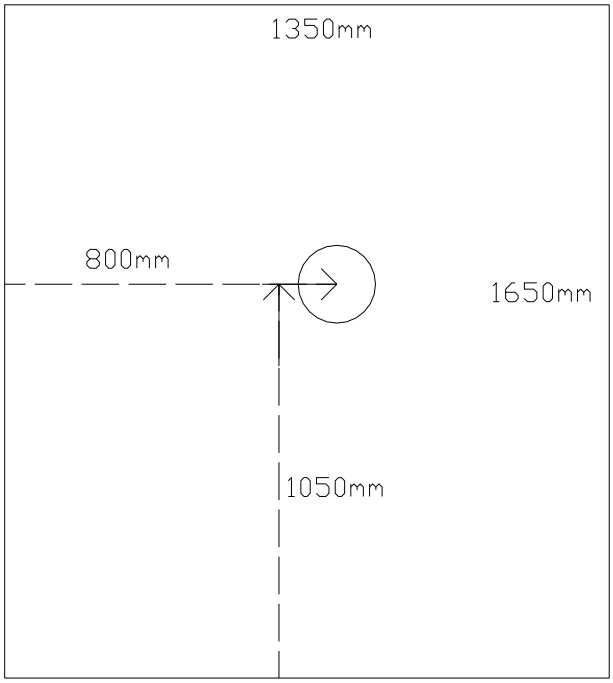
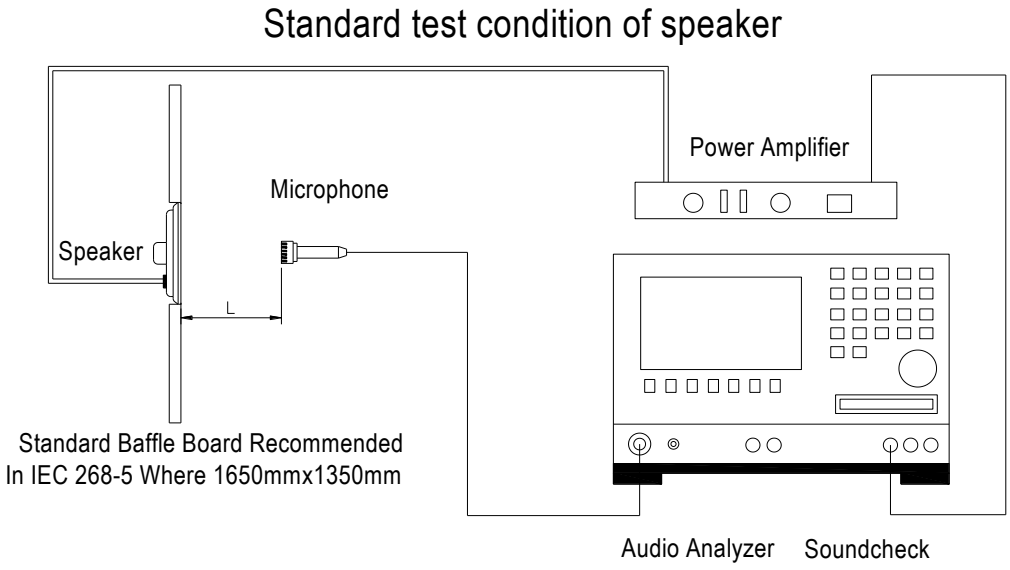


Fig. 1 Block Diagram for Measurement Method



L=10cm

Fig. 2 Speaker Test Condition

PACKAGING

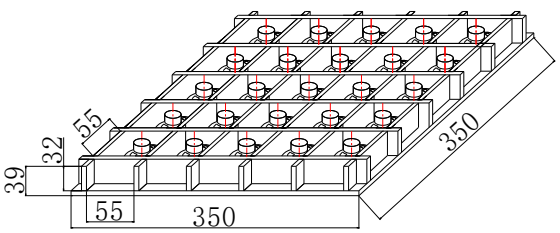
units: cm
Remark:

25pcs per tray

6trays for unit，1 units per carton

Total:150 pcs per box

Size:33.5*33.5*22.5cm



1.Each clapboard 25pcs,
each carton 6 clapboards,
150 pcs/carton
N.W: 11.3 KG, G.W: 13.3 KG
2.Corrugated paper: 350*350 mm 2 pcs
3.Carton box size:370*370*270 mm 1 pcs