

To:

Approval Sheet for Product Specification

请 承 认 书

PRODUCT NAME	SPEAKER
CUSTOMER PART NO	
QINGLONG PART NO	SP-28N1.5
DRAWING NO	
Issue Date	2016/07/20

【注意/Note】

- 1.This product shall comply with RoHS.上本品符合欧洲 RoHS 规定指令.
- 2.IN CASE OF CHANGES,SUCH AS DIE &MOLD, MANUFACTURING PROCESS, MATERIAL,APPEARANCE,AND INSPECION etc.,THE SAME PROCEDURE IS REQUIRED.此部品确认后,如模具、制造方法、材料、外观、检查等发生变更的情况下必须事前由双方进行合议

APPROVAL SEAL :				
DISCUSS		RESOLUTION		
QA	PURCHASE	ISSUED BY	CHECKED BY	APPROVED BY

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SIGNATURE	Issued by	Checked by	Approved by
	Liang Hongwei	He Binbin	Lu Tianming

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	MODEL NO.	SP-28N1.5

1.REVISION

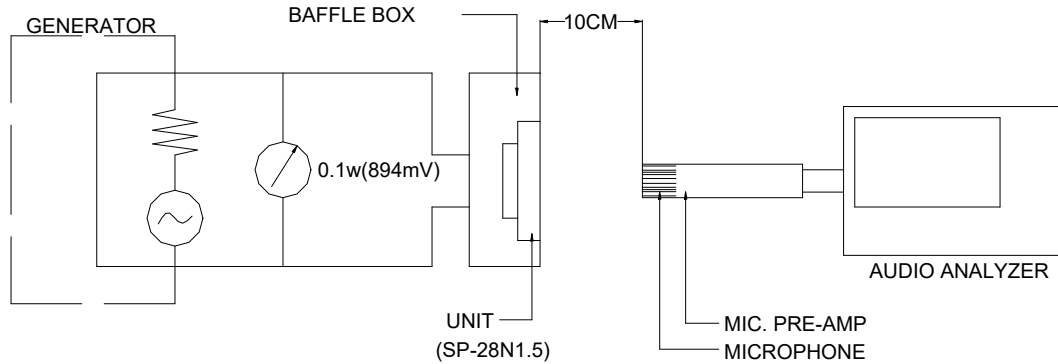
Revision	Date	Description	Reason	Page
0	2009-05-14	First issue	/	/
1	2010-02-03	Comply ROHS	Europe law	P0/P4
2	2010-03-15	Appearance of the diaphragm	Improve tone	P4
3	2016-07-20	Frequency response curve	Update Measuring equipment	P3

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2. Electrical and Mechanical Characteristics

2.1	TYPE	Ø 28X5.5 ±0.3 mm
2.2	Nominal input Power	1.5W
2.3	Impedance	8 ohm ± 15% at 1.0 V 1.5 K Hz
2.4	Resonance Frequency	800Hz ± 20% 1 V
2.5	Sensitivity (S.P.L)	91±3dBat (AVG0.8,1,1.2,1.5)KHz 0.1W/0.1m With 1000cc BOX.
2.6	Frequency Range	F₀ Hz ~ 10 KHz
2.7	Distortion	5% max at 1K Hz 1.0W
2.8	Max. Input power	2.0W Must be normal at a white noise (2.0W) for one minute.
2.9	Magnet (ND-FE-B)	Ø12.5 × 1.5 mm
2.10	Net Weight	6.8g ± 10%
2.11	Appearance	Should not exist any kind of obstacle to be harmful to Normal operation not any remarkable damages, cracks, rust and Distortions which may cause malfunctions.
2.12	Operation Test	Must be normal at a program source (1.5 W)
2.13	Buzz ,Rattle etc.	Should not be audible buzz and rattle at 3.46V) RMS sine wave Between (F₀ Hz to 10 KHz)
2.14	Terminal Strength	Capable of withstand a (1 kgf) load for 15 sec. Without Resulting in any damage or rejection.
2.15	Load Test (JIS FILTER,CLIP ON)	A (3.46V) RMS white noise is applied for 96 hours and then Should satisfy the test described under item 01~13
2.16	High Temperature Test	After having been in a test chamber for 96 hours at the condition of +65±3℃,20-40% RH and then left on hour in a room should satisfy the test described under item 01~13
2.17	Low Temperature Test	After having been in a test chamber for 96 hours at the condition of -25 ±3℃ , and then left on hour in a room should satisfy the test described under item 01~13
2.18	Humidity Test	After having been in a test chamber for 96 hours at the condition of +40℃,90% RH and then left on hour in a room condition Should satisfy the test described under item 01~13
2.19	Drop Test	Drop a unit unpacked onto a board of 20mm thick 18 times(3 time x 6 surfaces) from a height of 1 M and them should satisfy the test described item 01~13

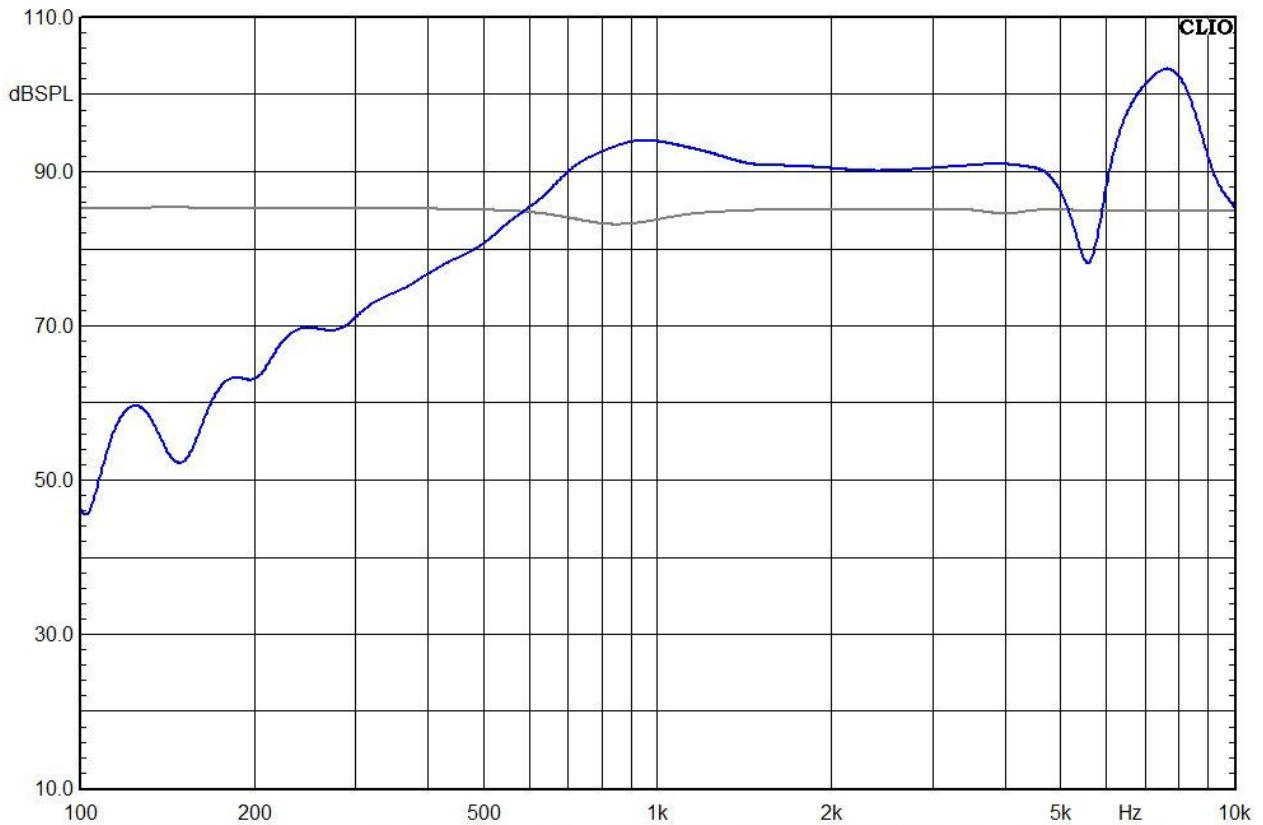
3. MEASURING CIRCUIT (SPEAKER MODE)



Testing Conditions.

- Anechoic Chamber
- Test Signal Input Power : 0.1W (0.89Vrms)
- Measured distance : 10cm / on the Axis of speaker
- Measuring equipment :Clio
- Test Environment : 25°C±5°C, R.H.90%±5%

4. FREQUENCY RESPONSE CURVE(SPEAKER MODE)



5. DIMENSION

TOLERANCE:±0.3 UNIT: mm

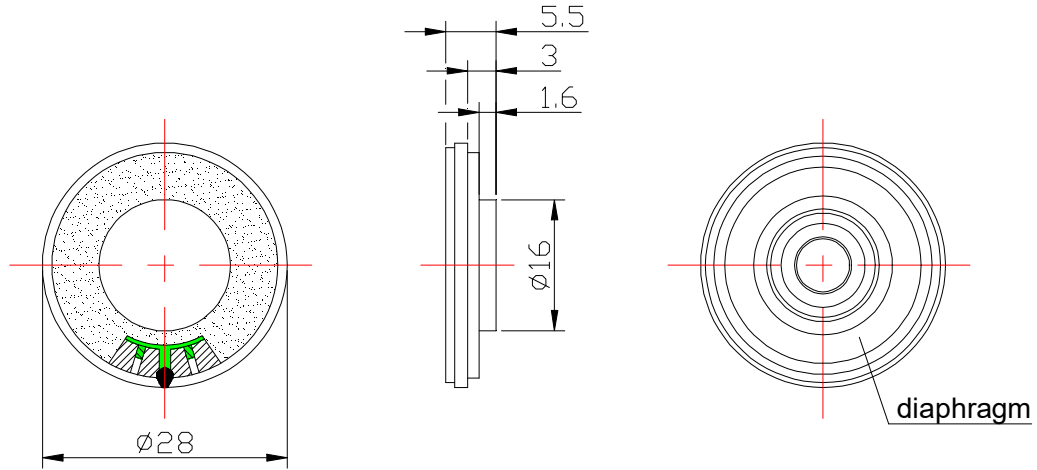


FIG.3

NO.	PART NAME	MATERIAL	QTY
1	Frame	SPCC	1
2	Diaphragm	PET	1
3	Magnet	Nd-Fe-B	1
4	Plate	SPCC	1
5	Voice Coil	Copper	1
6	PCB	Epoxy 0.4t-40	1
7	Damper Screen	Cloth	1
8	Gasket	Paper	1

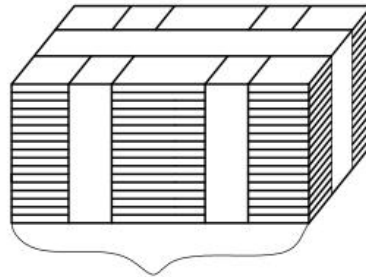
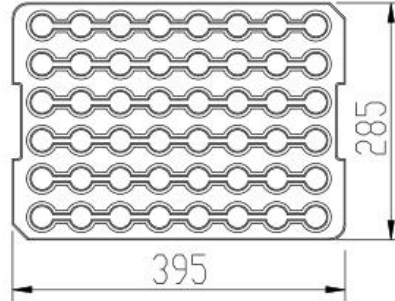
This component and assembly (including raw materials) comply with RoHS.

此部品和材料符合欧洲法规 RoHS.

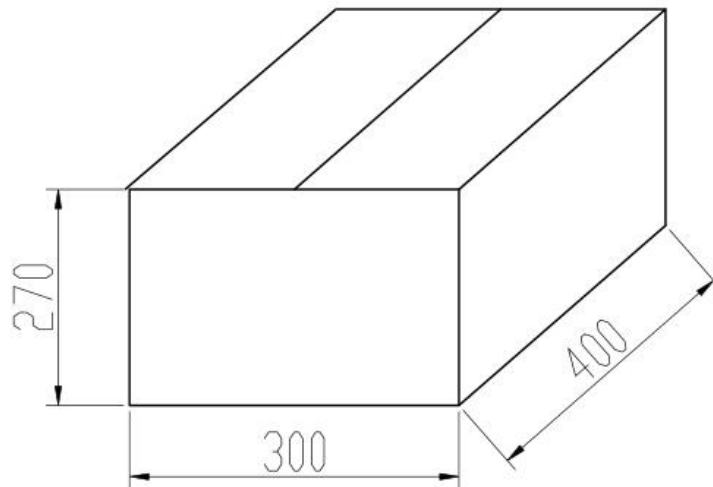
Changing of a delivery specification should connects in advance.

如变更材料规格必须事前由双方进行联系会议。

6.PACKING METHOD×



48pcs X20=960pcs



Remark:

48 pcs per unit

20 units per box

Total:960 pcs per box

Size:400× 300× 270mm