

To: _____

Approval Sheet for Product Specification

承认书

PRODUCT NAME	【产品名称】：	Loudspeaker
CUSTOMER PART NO.	【客户型号】：	
QINGLONG PART NO.	【我司型号】：	SP-30A45M-01
DESCRIPTION	【规格】：	Φ31X10.5, 45Ω

【注意/Note】

- 1, This product must comply with RoHS.此本品符合欧洲 RoHS 规定指令。
2. IN CASE OF CHANGES, SUCH AS DIE & MOLD, MANUFACTURING PROCESS, MATERIAL, APPEARANCE, AND INSPECTION 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 (承认印):				
DISCUSS		RESOLUTION		
QA	PURCHASE	ISSUED BY	CHECKED BY	APPROVED BY

SUPPLIER: CHANGZHOU QINGLONG ELECTRONIC COMPONENTS CO.,LTD

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FAX(传真): 86-519-85500519

<http://www.qinlon.com>

SIGNATURE	Issued by 担当	Checked by 核查	Approved by 确认	Date 日期
		Gu Haiping	Zou Eryong	Lu Tianming

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1. Scope: This specification is applied on the SP-30A45M-01 speaker.

Description of the model name: **SP**(speaker) , **30**(diameter 31.8mm), **A**(series No.) ,
45 (DC R 45 Ω), **M** (with Mesh screen) **01** (series)

2. Electrical Characteristics:

	Item	Specification	Condition
2.1	Coil DC resistance	42 Ω ± 10%	*At basic state
2.2	Impedance	45 Ω ± 15%	*At basic state (1K Hz 0.5Vrms)
2.3	Nominal Input	0.2W -0.5W (3.0-4.77Vrms)	
2.4	Max Input	0.8W (6.0Vrms)	Short term Dissipation Power peak Cycling 1 min.on & 2 min off.
2.5	Min. Sound pressure level	≥86dB	440Hz to 4KHz 0.2W、 sine wave、 10cm
2.6	Range of operation temperature	-40 ~ +105 °C	
2.7	Range of preservation temperature	-40 ~ +120°C	
2.8	Externals size	Φ 31.8 , H 10.5	Refer to drawing
2.9	Mass	8.2g ±7%	
2.10	Terminal strength	22.5N	Pull in the direction along the pin axis.

*** All acoustic measurements shall be done on baffle plate 40 x 40 cm, if not noticed otherwise**

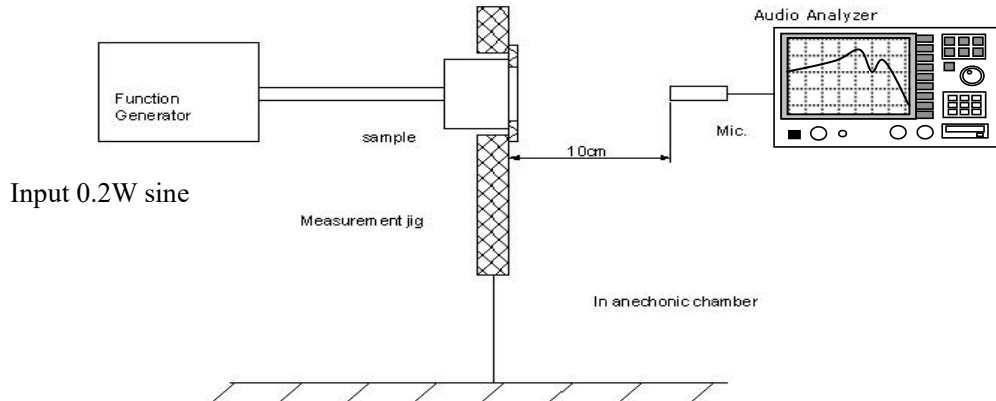
*** Standard state:**

Ordinary Temp.(15 ~35°C), Humidity (25~85% RH), Air pressure (860 ~1060 hPa).

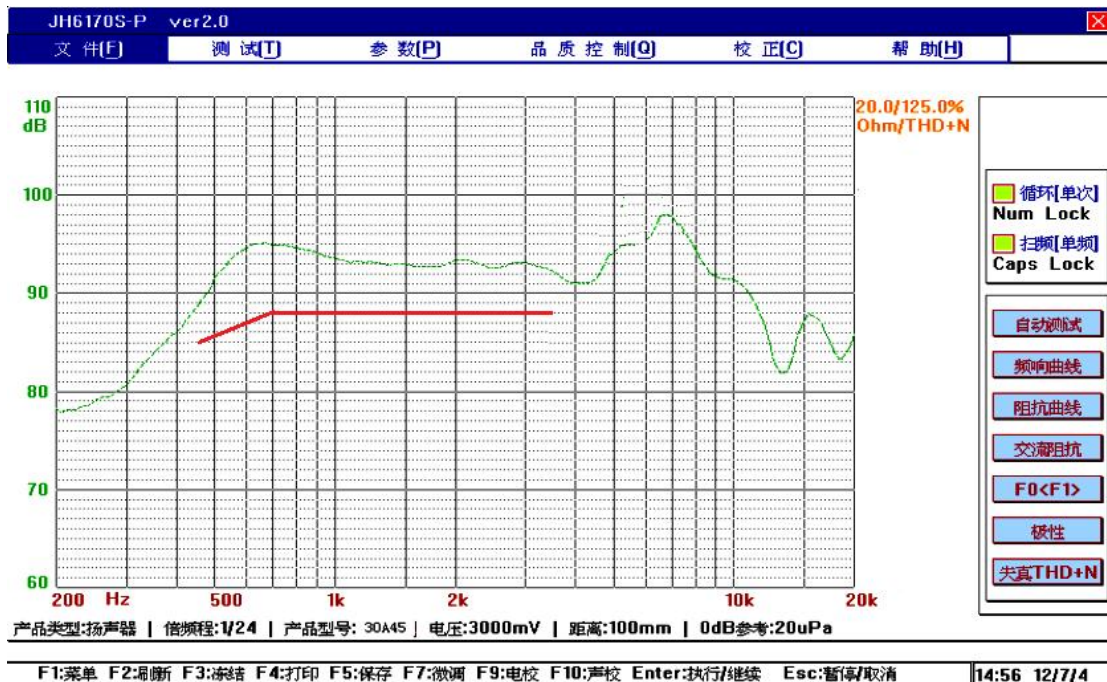
In case of doubtful judgment, the test is re-performed under basic state.

*** Basic state:** Temp.(20±2°C), Humidity (60 ~70 % RH), Air pressure (860 ~ 1060 hPa).

3.1 SPL (Sound Pressure Level) Measurement



3.2 Typical Frequency Response Curve



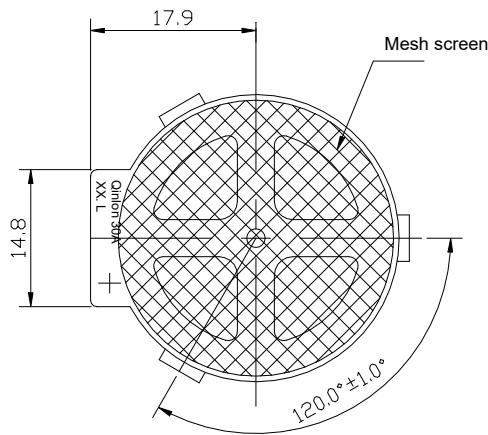
— SPL Curve
 — Lower limit Line

Test conditions: 0.2W sine wave distance 10cm ,
 The speaker is fixed on baffle plate 40x40cm <test fixture>

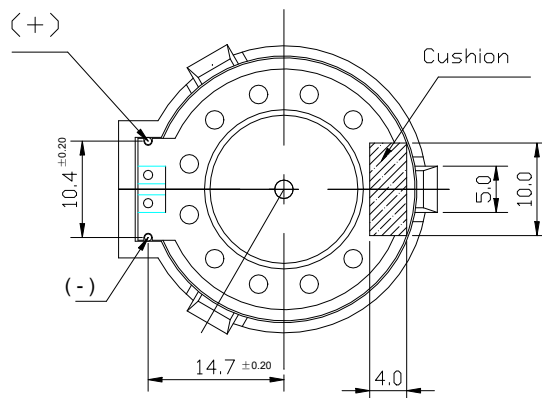
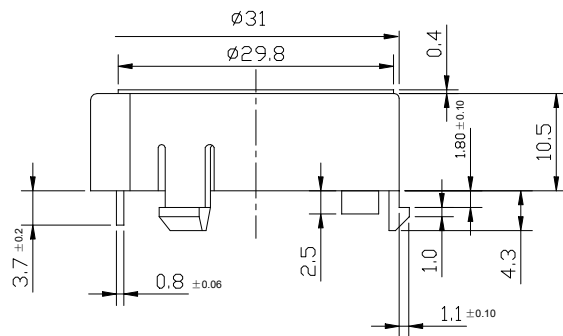
4. Mechanical Characteristics:

4.1 Appearance drawing and Dimension

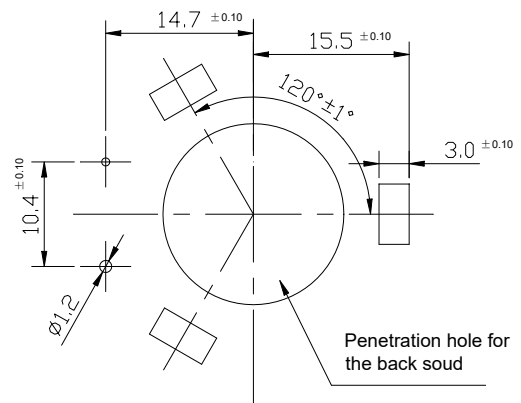
Unit: mm
Other Tolerance: ± 0.3



Marking:
Qinlon manufacturer
30A model
XX.L Date code (YY.M)

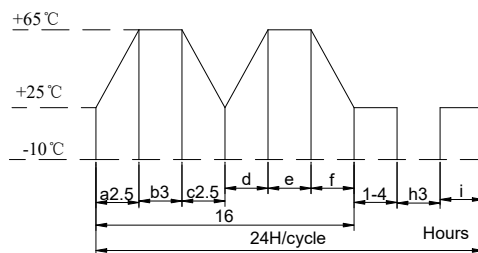


Recommend: PCB Layout of holes
T (PCB) = 1.6 ± 0.1 mm



5. Major reliability specification:

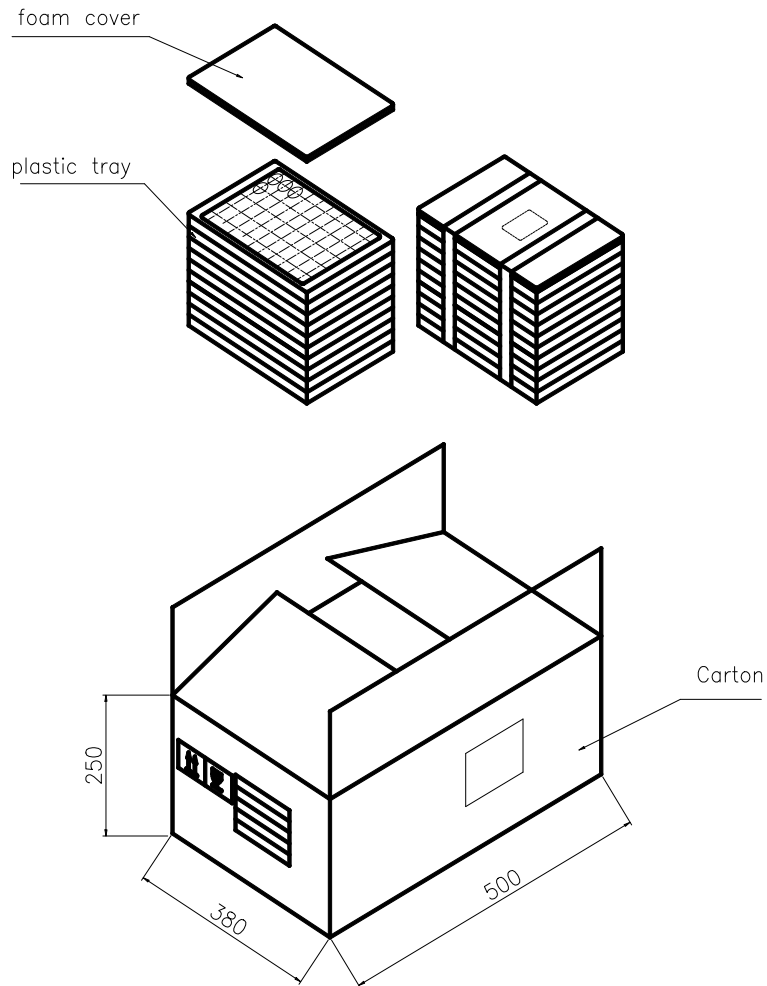
Item	Test condition	Criteria	Reference	
1	High temp. preservation	After the test the part shall meet specifications without any degradation in appearance and performance except SPL. SPL shall be \geq 83 dB or more at Electrical Characteristics -2.5		
2	Low temp. preservation		IEC60068-2-1	
3.	Thermal Shock		IEC60068-2-14	
4	Humidity Durability		IEC 60060 part 2-3	
5.	Ordinary Temp. life		Company standard	
6	High Temp. life			
7	Low Temp. life			
8	Max input test			
9	Thermal Humidity cycling		IEC60068-2-38	
11	Vibration			
12	Free drop		Electrical Test same above, Exclude bending of Pin	IEC60068-2-32
13	Solderability		95% surface of lead pins must be covered with fresh solder and no soldering holes should be found.	IEC60068-2-20



A,b,d,e,g,i:90-90%RH. c,f:80-90%RH .10 cycles

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6.PACKING DRAWING:



- Notes:
- 1, 50 pcs per tray
 - 2, 20 traies per carton
 - 3, Total: 1000 pcs per carton , 11 Kg

