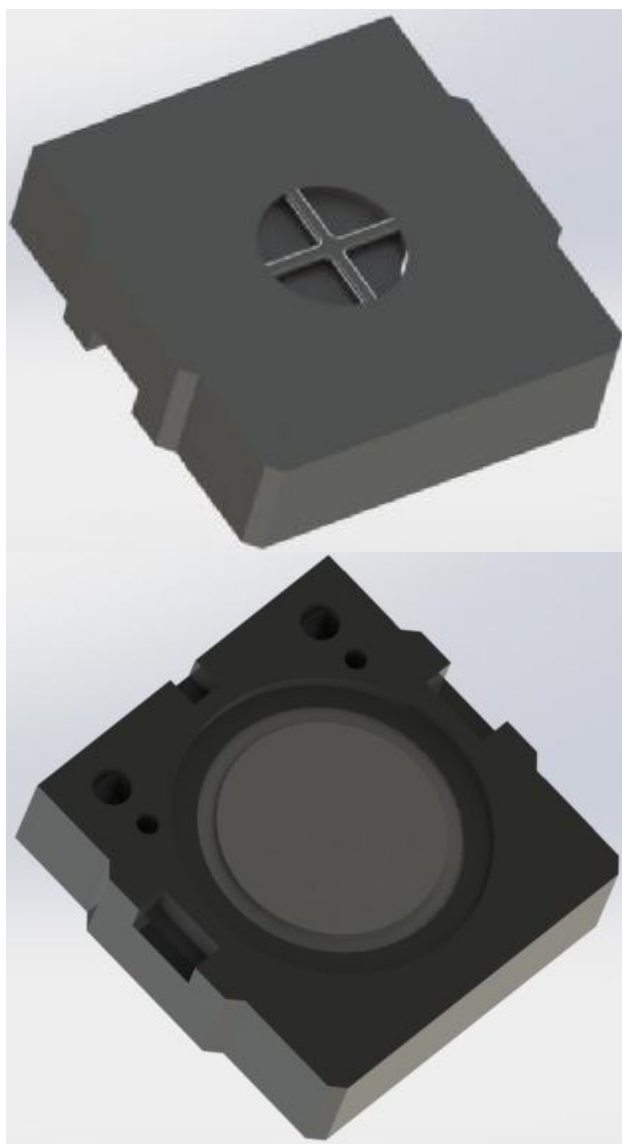


SPECIFICATION

SMS1515-08H04 LF





SPECIFICATION FOR DYNAMIC SPEAKER

TOTAL PAGE

08

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RoHS

Customer		Model Name	SMS1515-08H04 LF
Customer P/N		Product No.	138700
Date	28 Sep.2018	Issue No.	BS/TES01.529D1
Page	01 of 09	Issue Date	2018.09.28

Approval:

- 1.Characteristics
- 2.Drawing
- 3.Reliability Test
- 4.Reflow condition
- 5.Tape on Reel Packing
- 6.MSL rating and Notice
- 7.History change record

Drawn by	Checked by	Approved by	Customer approved
杨利平	徐 波	赵 峥	

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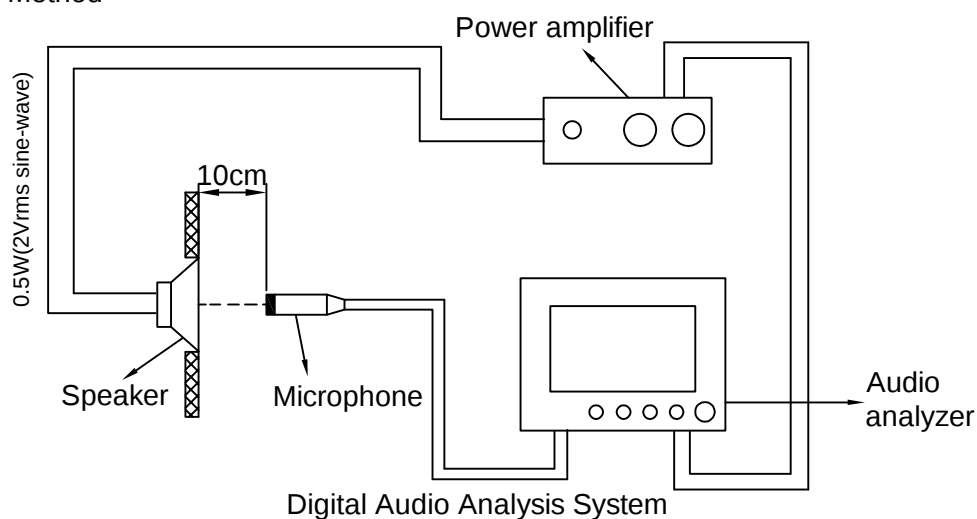
SMS1515-08H04 LF

1. Characteristics

1.1 Electrical and Mechanical Characteristics

No.	Item	Specifications
1.	Dimensions	Please refer to profile drawing
2.	AC Impedance	8 ohm $\pm$ 20% at 0.5Vrms/2KHz
3.	Resonance Frequency	800 $\pm$ 15%Hz/0.5Vrms
4.	Rated Power	0.5W(2Vrms)
5.	Maximum Power	0.8W(2.53Vrms)
6.	Sound Pressure Level	87 $\pm$ 3dB/0.5W/10cm
		at 1k,1.6k,2k,3.2kHz average
7.	Sound pressure level after reflow soldering	$\geq$ 87,84,70,70,74dB/0.5W/10cm
		(at 6.3kHz,6.0kHz,5.0kHz,4.5kHz,4.0kHz)
8.	Buzzes&Rattles	Must be normal at sine wave 2Vrms
9.	Total Hamonics Distortion	Max.5%(0.5W/2.2KHz)
10.	Frequency Response	Refer to the attached figure
11.	Operating Temperature	-40~+85°C
12.	Storage Temperature	-40~+105°C
13.	Weight	~1.5g

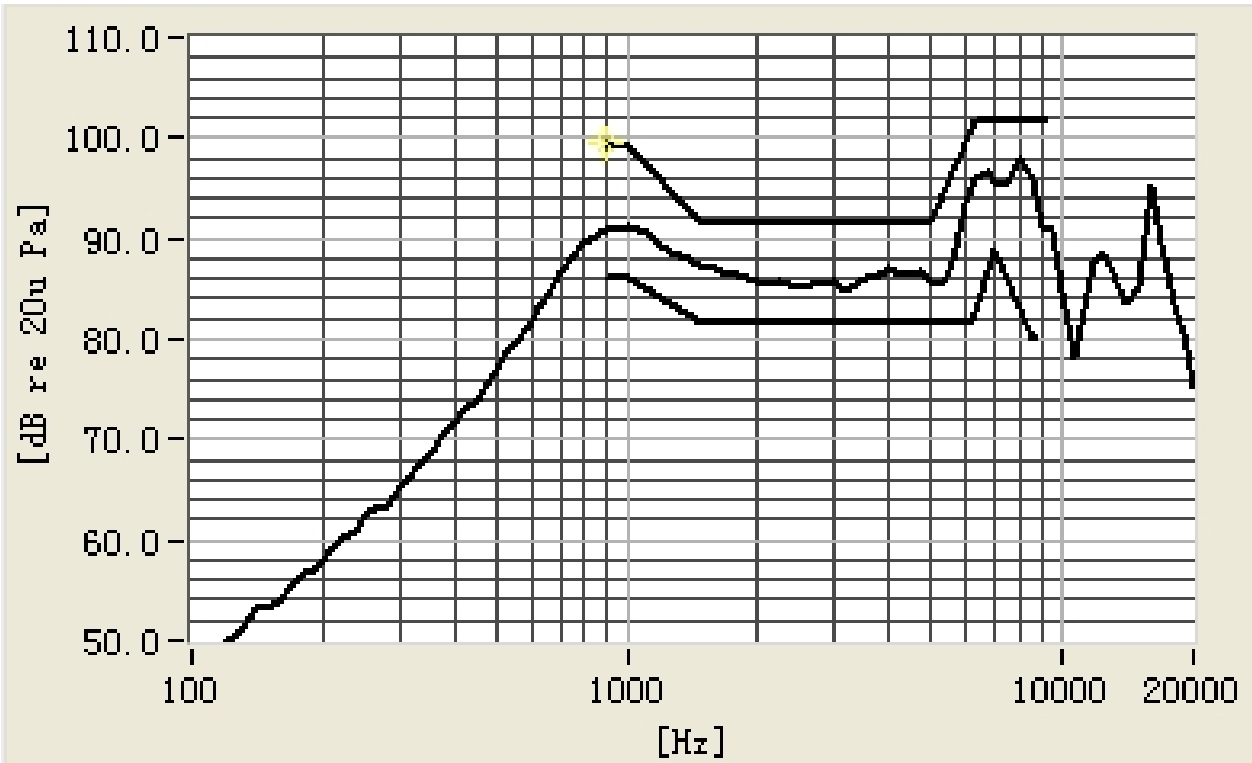
1.2 Test Method



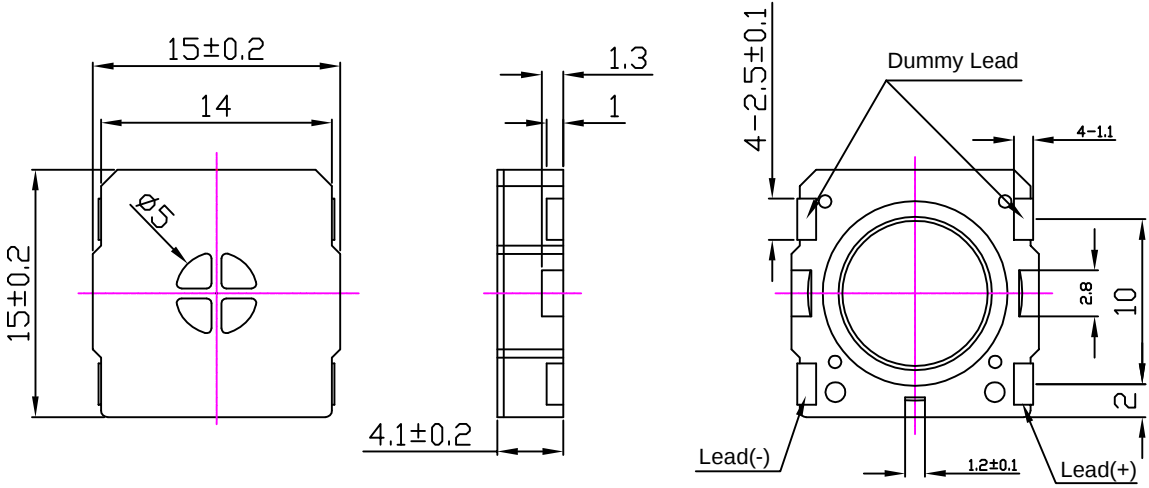
A	D1	2018.09.28	杨利平	Date:	2018.09.28	SMS1515-08H04 LF	A
	D	2018/09/12	徐 亮	Drawn by:	杨利平		
	Rev.	Date	Drawn	Checked by:	徐 波	Speaker	
			Note	Approved by:	赵 峥		
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SMS1515-08H04 LF

1.3 Frequency response



2 .Drawing



Unit:mm
tolerance:±0.2

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SMS1515-08H04 LF

3. Reliability test

3.1 Low Temperature Test

Temperature -40°C
Duration 240hrs

3.2 High Temperature Test

Temperature +105±2°C
Duration 240hrs

3.3 Damp Heat

Temperature 40±2°C
Relative Humidity 90%-95%RH
Duration 240hrs

3.4 Room temperature life test

Temperature 15~35°C
Relative Humidity 25%-85%RH
Voltage 2Vrms
Duration 240hrs

3.5 Temperature Cycle

Temperature -25°C / +65°C
Temperature Change 1± 2 /min
Duration at +65°C 2h(each cycle)
Duration at -25°C 2h(each cycle)
Duration for one cycle 8h
Cycles 10

All these tests above should be measured after leaving normal temperature for 2hrs.

3.6 Drop Test

Height 1m(on the concrete floor)
Direction of drop 1 each corner, 3 each sides, 6 plain

Notice:

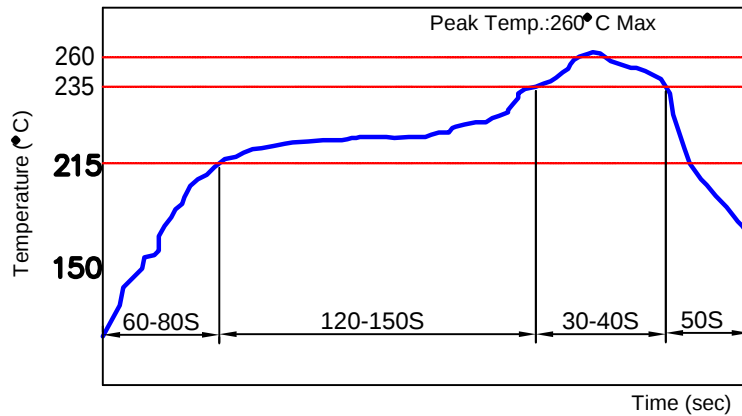
sensitivity difference at 1kHz shall be within ± 3dB from initial value after test.

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	Rev.	Date	Drawn	Note	Checked by:	徐 波	Speaker	
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SMS1515-08H04 LF

4.Reflow condition

4.1 reflow solding

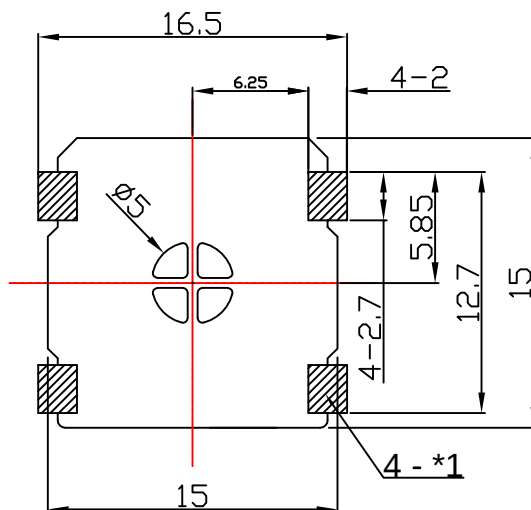


Preheating: 215°C for 120-150 seconds

Soldering Temperature: 235°C for 30-40 seconds

Peak Soldering Temperature: 260°C max for 10 seconds

4.2 Recommended Land Pattern Dimensions



Note

1) Land pattern*1

2) Avoid any pattern on the shade area

*2 of PC board is highly recommended

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	Rev.	Date	Drawn	Checked by:	徐 波	Speaker
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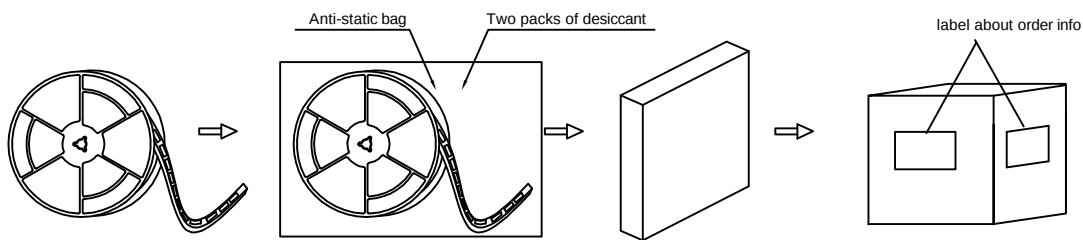
5.1 packing drawing

Technical drawing showing the dimensions of a wheel and its components. The wheel has a maximum diameter of 330 Max. The components include a Cover Film (400-560 Leader) and a Trailer (160-200). The wheel is shown with a central hub and spokes. The dimensions are labeled as follows:

- 29 Max (Top dimension)
- 25.5 (Bottom dimension)
- $\phi 13 \pm 0.2$ (Inner diameter)
- $\phi 100 \pm 0.5$ (Outer diameter)
- 330 Max (Wheel diameter)
- Components (Label for the central part)
- Cover Film (Label for the top part)
- 400-560 Leader (Dimension for the top part)
- 240-280 (Dimension for the bottom part)
- Trailer 160-200 (Dimension for the bottom part)

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SMS1515-08H04 LF

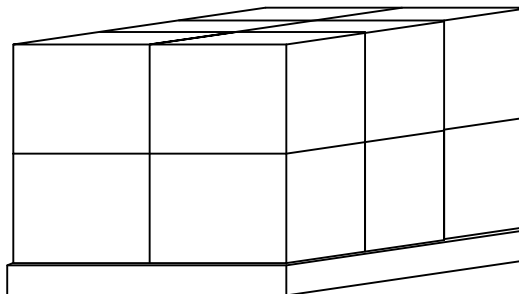


label

BeStar
Type:
P/O:
Qty:
Date code

5.2 packing quantity

- 5.21 600pcs/reel
- 5.22 5reel/carton
- 5.23 3000 pcs/carton in total
- 5.24 carton size 38x28x37cm
- 5.25 12carton/tray
- 5.26 tray size 85x77x74cm



6.MSL rating and Notice

Moisture Sensitivity Level and Floor Life

Level	Floor Life(out of bag) at Factory Ambient $\leq 30^{\circ}\text{C}/85\%\text{RH}$ or as Stated
3	168 hours

6.1 The products mustn't be washed

6.2 Storage Condition

The products should be stored in the room ,where the temperature/humidity is stable.
And avoid such places where there are large temperature changes.

Please store the products at the following conditions:

Temperature: -10 to $+40^{\circ}\text{C}$ Humidity: 15 to 85% R.H.

6.3 Expire Date on Storage

Expire date (Shelf life) of the products is six months after delivered under the conditions of a sealed and an unopened package. Please use the products within six months after delivered.

If you store the products for a long time (more than six months), use carefully because the products may be degraded in the solderability and/or rusty.Please confirm solderability and characteristics for the products regularly.

6.4 Notice on Product Storage

(1) Please do not store the products in a chemical atmosphere (Acids, Alkali, Bases, Organic gas, Sulfides and so on), because the characteristics may be reduced at quality, and/or be degraded in the solderability due to the storage in a chemical atmosphere.

(2) Please use the products immediately after the package is opened, because the characteristics may be reduced at quality, and/or be degraded in the solderability due to storage under the poor condition.

(3) Please do not drop the products to avoid cracking of ceramic element.

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7. History change record

[illegible]

A				Date:	2018.09.28	SMS1515-08H04 LF		A			
	D1	2018.09.28	杨利平		Drawn by:				杨利平		
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	Rev.	Date	Drawn	Note	Approved by:	赵 峥					
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