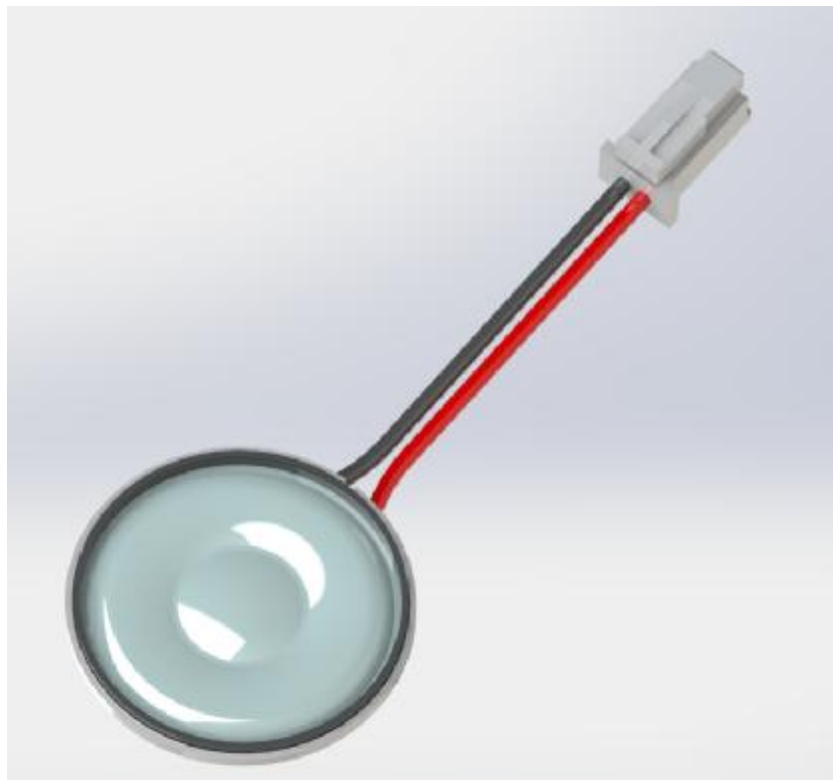
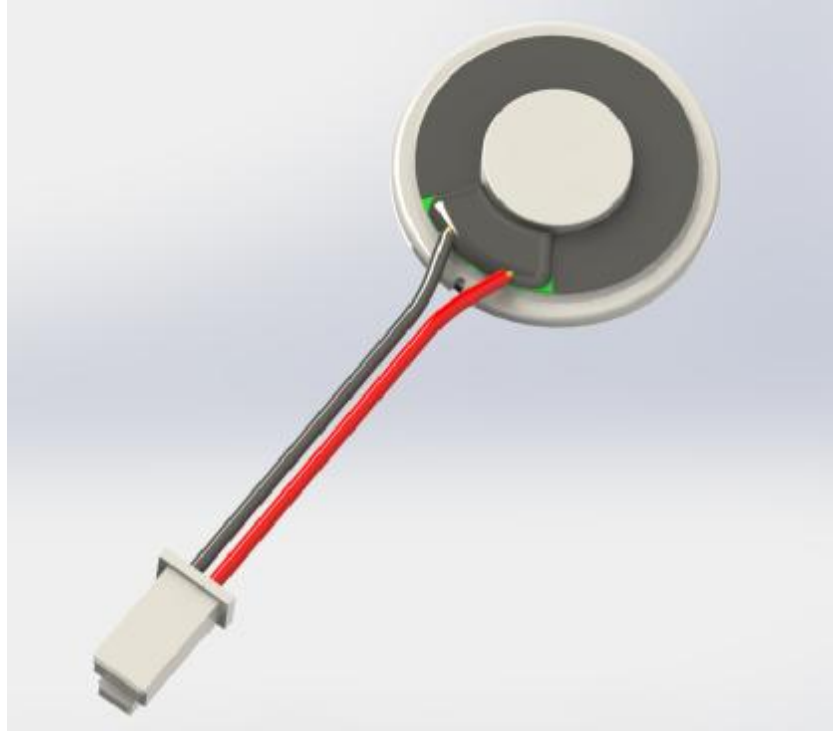


# SPECIFICATION

BMS28-12B-08H05W135-5035



	<b>APPROVAL SHEET FOR DYNAMIC SPEAKER</b>		
	TOTAL PAGE	11	<a href="http://www.be-star.com">www.be-star.com</a>

## Preliminary Specification for Dynamic Speaker

Customer		Model Name	BMS28-12B-08H05W135-5035
Customer P/N		Product No.	***
Date	08 Apr.2020	Issue No.	BS/TES01.***A0
Page	01 of 11	Issue Date	2020.04.08

Table of Contents:

- 1.Characteristics
- 2.Bill of Material
- 3.Drawing
- 4.Reliability Test
- 5.Packing
- 6.History Change Record

Drawn by	Checked by	Approved by	Customer approved
任江凤	黄 金	张勇磊	

BESTAR Holdings Co., Ltd.  
 No.199, West Huanghe Road, Changzhou, Jiangsu, P.R. China  
 Tel: +86 5196 789 6200  
 Fax: +86 5196 789 6220  
 E-Mail: [Info@be-star.com](mailto:Info@be-star.com)  
 Web: [www.be-star.com](http://www.be-star.com)

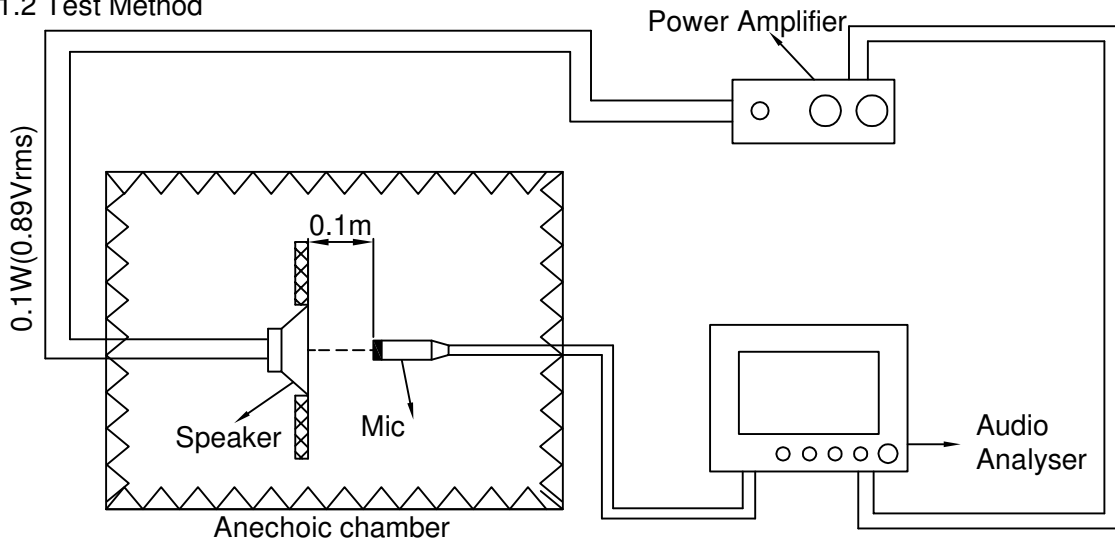
# BMS28-12B-08H05W135-5035

## 1.Characteristics

### 1.1 Electrical and Mechanical Characteristics

No	Item	Specifications
1	Size	∅28*5mm
2	Impedance at 1.0KHz/1V	8±15% Ω
3	Lowest Resonance frequency	750Hz±20%
4	Frequency Response	F0~20KHz
5	Rated input power	0.8w
6	Maximum input power	1.0w
7	Buzz & Rattle(at sine wave 2.53V)	must be normal between 750Hz~3.5KHz
8	SPL(0.1W,0.1m)	91±3dB ( at 1KHz )
9	THD(0.1W,0.1m)	≤5% (at 1KHz)
10	Weight	~ 5.5g
11	Operating temperature	-20...+70°C
12	Storage temperature	-20...+70°C

### 1.2 Test Method



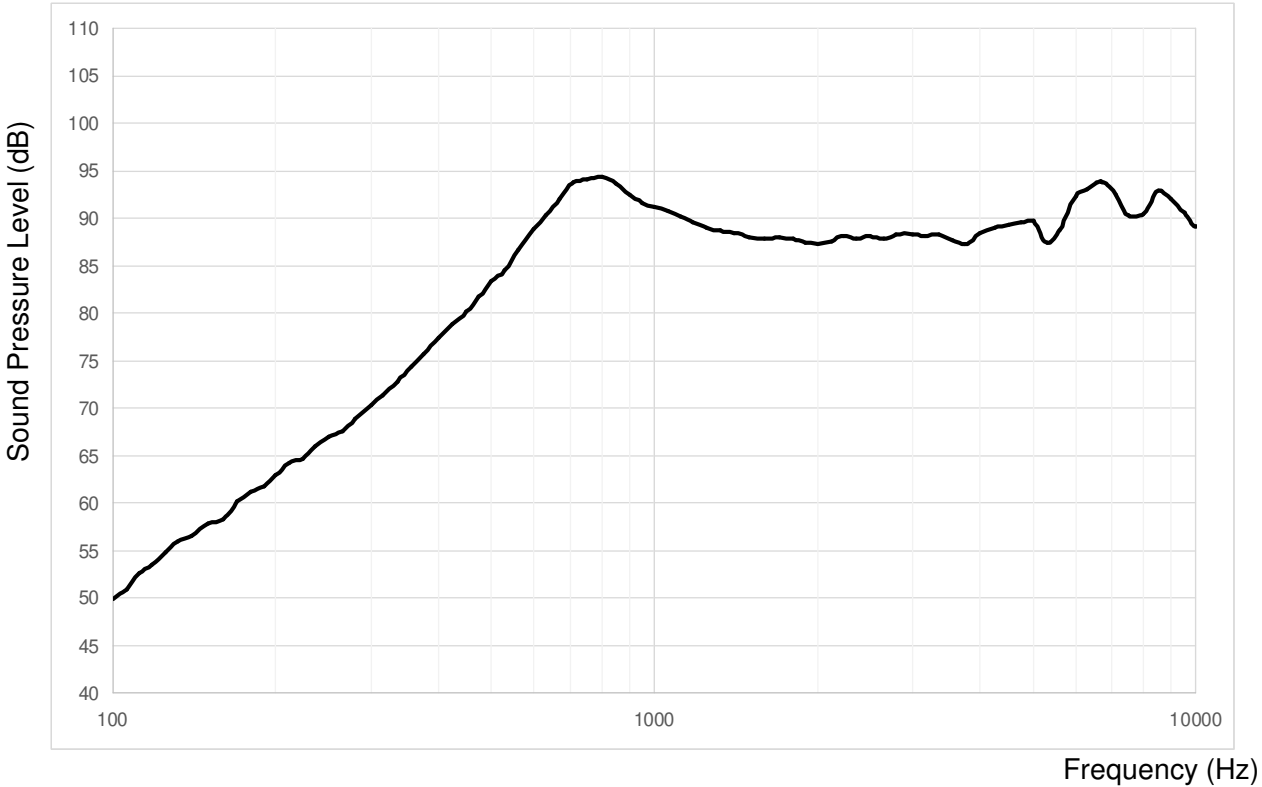
				Date:	2020.04.08	BMS28-12B-08H05W135-5035
				Drawn by:	任江凤	
A0	2020.04.08	任江凤		Checked by:	黄金	Speaker
Rev.	Date	Drawn	Note	Approved by:	张勇磊	
BESTAR Holdings Co., Ltd				http://www.be-star.com info@be-star.com		DRG NO: BS/TES01.*****A0 Page:02 of 11

This print and information there in are proprietary to BESTAR Holdings Co., Ltd. and shall not be used in whole or in part without its written content

**BMS28-12B-08H05W135-5035**

1.3. Frequency Response Curve (only for reference)

A: Frequency Response Magn 0 dB re 20.00 μPa/V 1/12 Oct



1.3.1 Sensitivity

SPL is expressed in dB rel 20 μPa, computed according to IEC 268-5.  
 Measurement set up according chapter 1.2 and parameters according chapter 1.3.

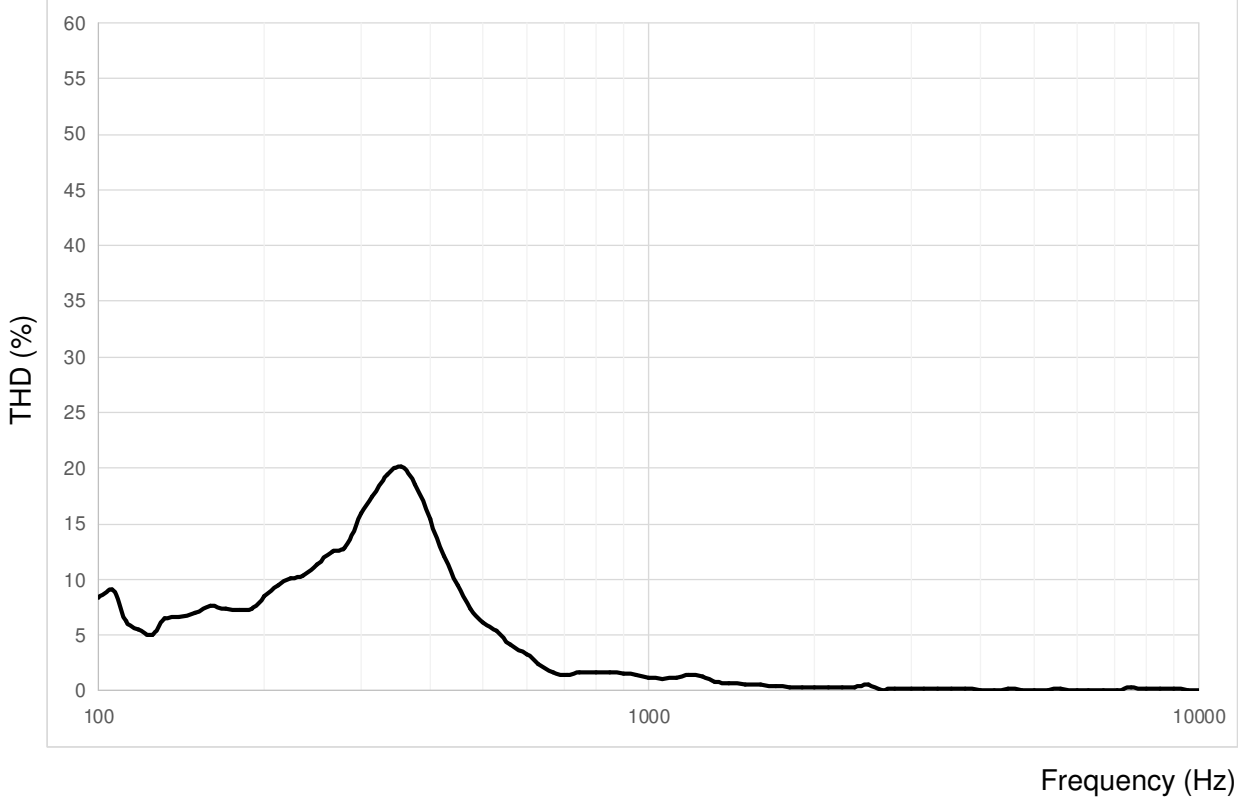
This print and information there in are proprietary to BESTAR Holdings Co., Ltd. and shall not be used in whole or in part without its written consent.

				Date:	2020.04.08	BMS28-12B-08H05W135-5035
				Drawn by:	任江凤	
A0	2020.04.08	任江凤		Checked by:	黄金	Speaker
Rev.	Date	Drawn	Note	Approved by:	张勇磊	
BESTAR Holdings Co., Ltd				<a href="http://www.be-star.com">http://www.be-star.com</a> <a href="mailto:info@be-star.com">info@be-star.com</a>		DRG NO: BS/TES01.*****A0
						Page:03 of 11

**BMS28-12B-08H05W135-5035**

1.4 Total Harmonic Distortion (only for reference)

A: Frequency Response Magn 0 dB re 20.00 μPa/V 1/12 Oct



1.4.1 THD

THD is measured according test set up in chapter 1.2 and parameters according chapter 1.4.

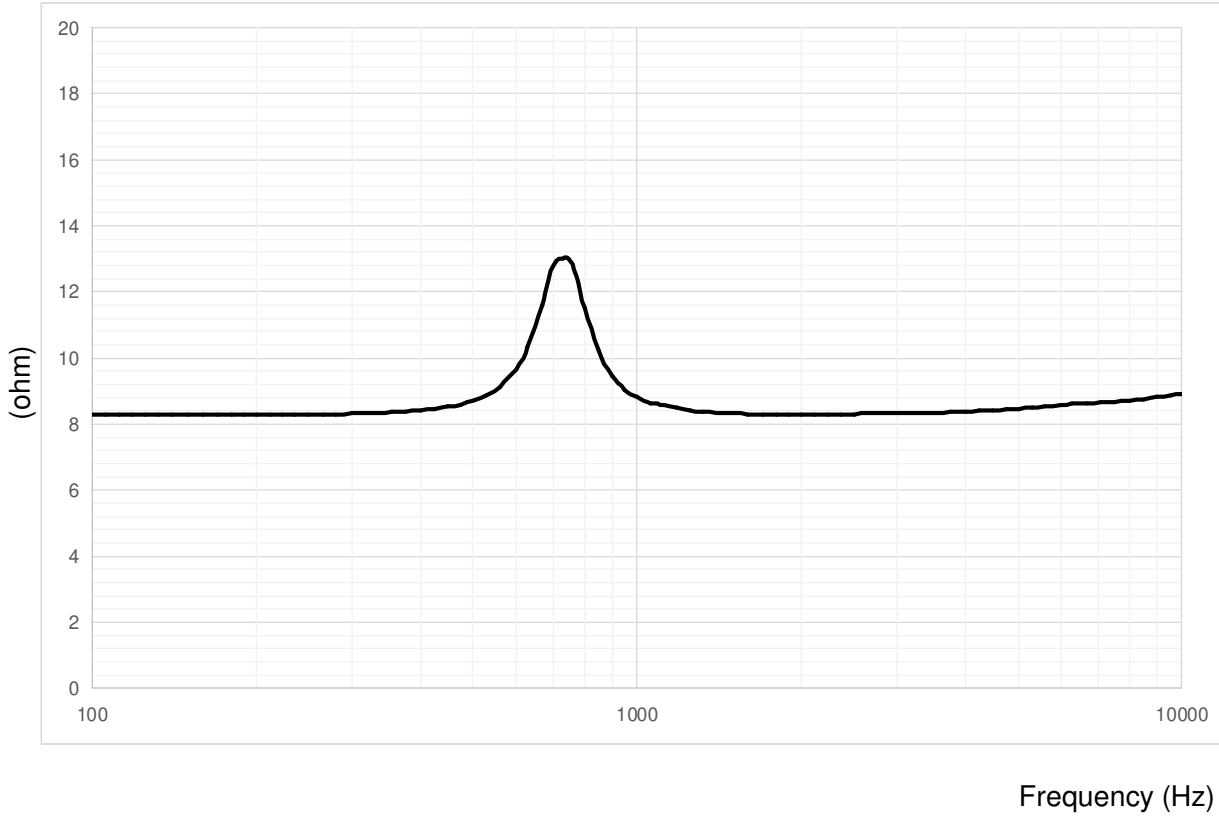
This print and information there in are proprietary to BESTAR Holdings Co., Ltd. and shall not be used in whole or in part without its written content

				Date:	2020.04.08	BMS28-12B-08H05W135-5035
				Drawn by:	任江凤	
A0	2020.04.08	任江凤		Checked by:	黄金	Speaker
Rev.	Date	Drawn	Note	Approved by:	张勇磊	
BESTAR Holdings Co., Ltd				<a href="http://www.be-star.com">http://www.be-star.com</a> <a href="mailto:info@be-star.com">info@be-star.com</a>		DRG NO: BS/TES01.*****A0
						Page:04 of 11

**BMS28-12B-08H05W135-5035**

1.5 F0 Curve (only for reference)

A: Frequency Response Magn 0 dB re 20.00μPa/V 1/12 Oct



1.5.1 Resonance Frequency

Resonance frequency is measured according test set up in chapter 1.2and parameters according chapter 1.5

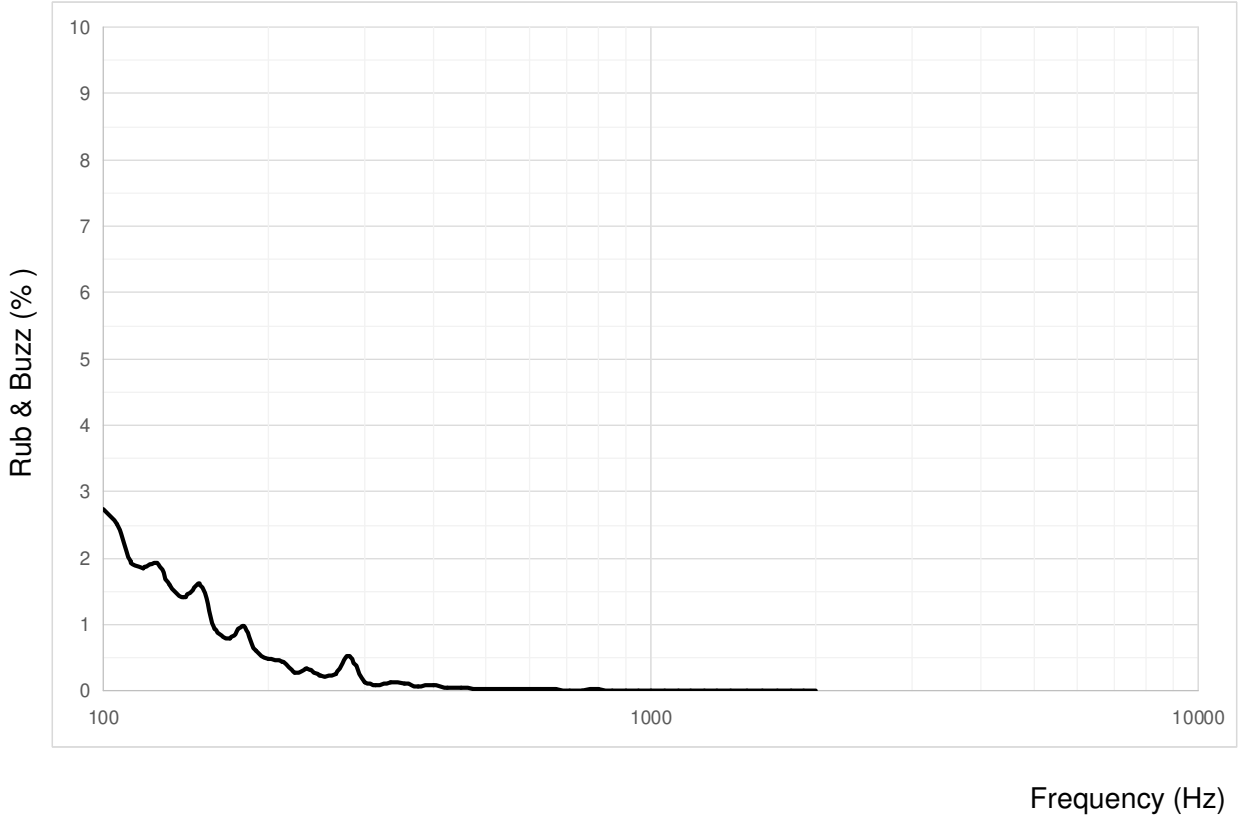
This print and information there in are proprietary to BESTAR Holdings Co., Ltd. and shall not be used in whole or in part without its written content

				Date:	2020.04.08	BMS28-12B-08H05W135-5035
				Drawn by:	任江凤	
A0	2020.04.08	任江凤		Checked by:	黄金	Speaker
Rev.	Date	Drawn	Note	Approved by:	张勇磊	
BESTAR Holdings Co., Ltd				<a href="http://www.be-star.com">http://www.be-star.com</a> <a href="mailto:info@be-star.com">info@be-star.com</a>		DRG NO: BS/TES01.*****A0
						Page:05 of 11

**BMS28-12B-08H05W135-5035**

1.6 Rub & Buzz Curve (only for reference)

A: Frequency Response Magn 0 dB re 20.00μPa/V 1/12 Oct



1.6.1 R&B

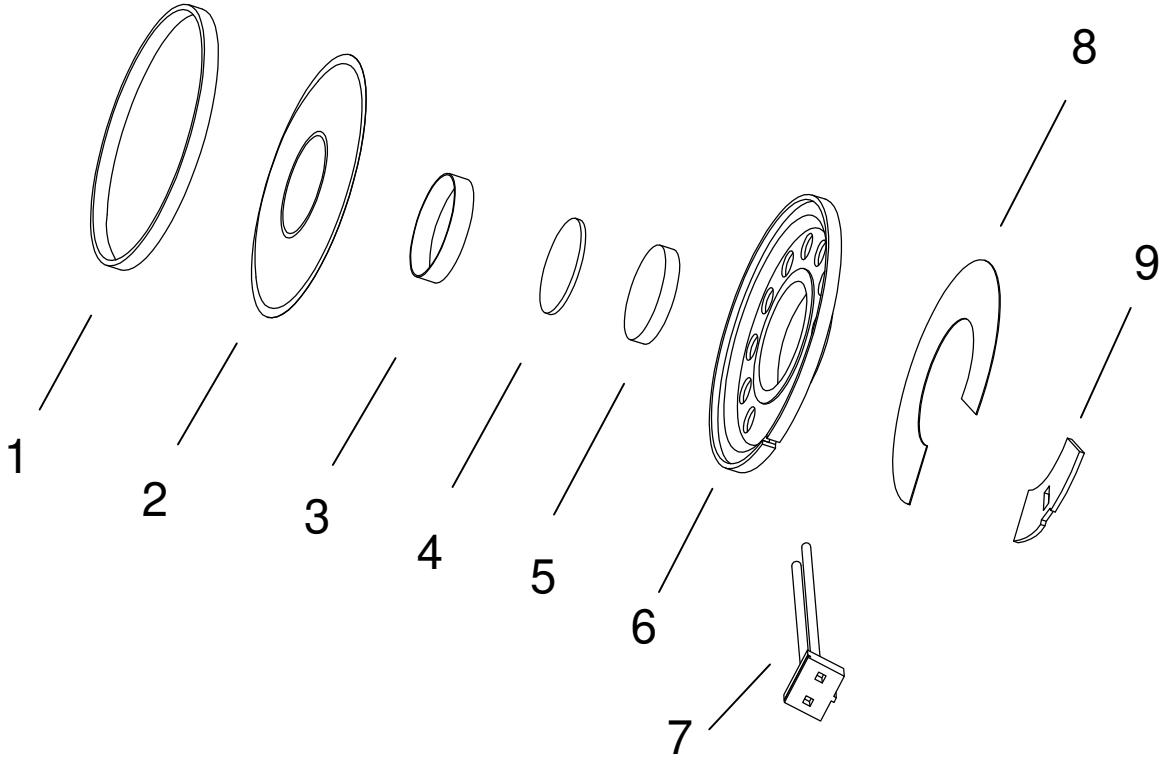
R&B is measured according test set up in chapter 1.2 and parameters according chapter 1.6

This print and information there in are proprietary to BESTAR Holdings Co., Ltd. and shall not be used in whole or in part without its written content

				Date:	2020.04.08	BMS28-12B-08H05W135-5035
				Drawn by:	任江凤	
A0	2020.04.08	任江凤		Checked by:	黄金	Speaker
Rev.	Date	Drawn	Note	Approved by:	张勇磊	
BESTAR Holdings Co., Ltd				<a href="http://www.be-star.com">http://www.be-star.com</a> <a href="mailto:info@be-star.com">info@be-star.com</a>		DRG NO: BS/TES01.*****A0
						Page:06 of 11

**BMS28-12B-08H05W135-5035**

**2. Bill of Material**



9	PCB	Epoxy and Cu
8	Mesh	Cloth
7	Plug wire	Cu and PVC
6	Frame	SPCC
5	Magnet	NdFeB
4	Plate	SPCC
3	Voice coil	Cu
2	Diaphragm	PET
1	Gasket	ABS
No	Parts Name	Material

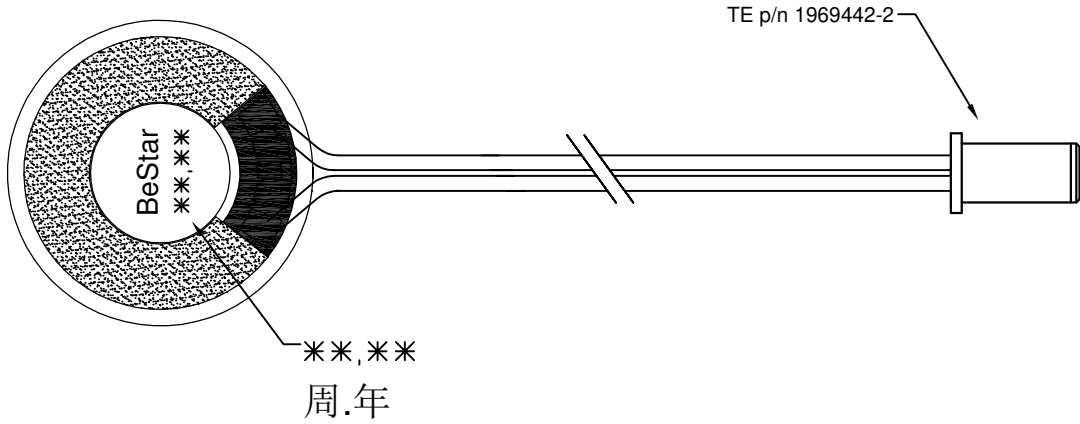
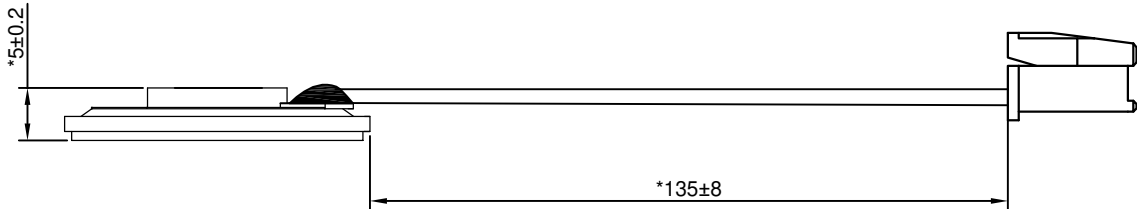
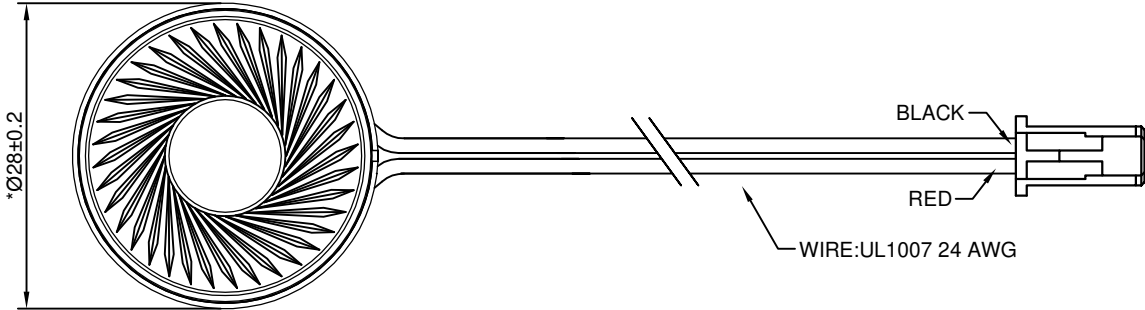
This print and information there in are proprietary to BESTAR Holdings Co., Ltd. and shall not be used in whole or in part without its written content.

				Date:	2020.04.08	BMS28-12B-08H05W135-5035
				Drawn by:	任江凤	
A0	2020.04.08	任江凤		Checked by:	黄金	Speaker
Rev.	Date	Drawn	Note	Approved by:	张勇磊	
BESTAR Holdings Co., Ltd						DRG NO: BS/TES01.*****A0
						Page:07 of 11



**BMS28-12B-08H05W135-5035**

**3. Drawing**



unit:mm  
tolerance:±0.3

				Date:	2020.04.08	BMS28-12B-08H05W135-5035
				Drawn by:	任江凤	
A0	2020.04.08	任江凤		Checked by:	黄金	Speaker
Rev.	Date	Drawn	Note	Approved by:	张勇磊	
BESTAR Holdings Co., Ltd				<a href="http://www.be-star.com">http://www.be-star.com</a> <a href="mailto:info@be-star.com">info@be-star.com</a>		DRG NO: BS/TES01.*****A0
						Page:08 of 11

This print and information there in are proprietary to BESTAR Holdings Co., Ltd. and shall not be used in whole or in part without its written content.

# BMS28-12B-08H05W135-5035

## 4. Reliability Test

### 4.1 Load Test

Power 0.8W (White noise / F0~3500Hz)  
 Duration 96hrs

### 4.2 High Temperature Test

Temperature +70±3°C  
 Duration 96hrs

### 4.3 Low Temperature Test

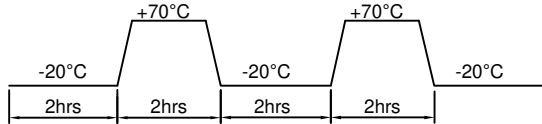
Temperature -20±3°C  
 Duration 96hrs

### 4.4 Damp Heat

Temperature 40±3°C  
 Relative Humidity 90%-95%RH  
 Duration 96hrs

### 4.5 Temperature Cycle Test

Cycle 5



### 4.6 Drop Test

Height 75cm (in state of packing)  
 Times 10 (Drop onto hardwood board)

### 4.7 Vibration Test

10 ~ 55 ~ 10Hz sin-wave sweep 15min. 5G (constant) X,Y,Z 3 directions 32 hours each, total 96 hours, 0.8W, F0~3500Hz, White noise

### 4.8 Lead wire pull strength

3.0N for 30 sec. Horizontal, 2.0N 30 sec. vertical

### Notice:

1.Immediately after reliability test,the samples shall be stored under climatic conditions such as normally exist in ordinary rooms or laboratories.Unless otherwise noted,the recovery period shall be 4hrs at least before performance testing.After the waterproofing test, the sample should be stored immediately under the usual weather conditions in ordinary room or laboratory, and the test should be carried out 21.hours after recovery.

2.After any of the above tests the response at 2~5KHz shall not deviate more than ±3 dB from the initial value.

				Date:	2020.04.08	BMS28-12B-08H05W135-5035
				Drawn by:	任江凤	
A0	2020.04.08	任江凤		Checked by:	黄金	Speaker
Rev.	Date	Drawn	Note	Approved by:	张勇磊	
BESTAR Holdings Co., Ltd				http://www.be-star.com info@be-star.com		DRG NO: BS/TES01.*****A0
						Page:09 of 11

This print and information there in are proprietary to BESTAR Holdings Co., Ltd. and shall not be used in whole or in part without its written content

BMS28-12B-08H05W135-5035

5 Packing

**TBD**

This print and information there in are proprietary to BESTAR Holdings Co., Ltd. and shall not be used in whole or in part without its written content.

6						5						4						3						2						1					
H												H																							
G												G																							
F												F																							
E												E																							
D												D																							
C												C																							
B												B																							
A												A																							
				Date:				2020.04.08				BMS28-12B-08H05W135-5035																							
				Drawn by:				任江凤				Speaker																							
A0		2020.04.08		任江凤		Checked by:		黄金																											
Rev.		Date		Drawn		Note		Approved by:		张勇磊																									
BESTAR Holdings Co., Ltd												<a href="http://www.be-star.com">http://www.be-star.com</a> <a href="mailto:info@be-star.com">info@be-star.com</a>						DRG NO: BS/TES01.*****A0 Page:10 of 11																	
6						5						4						3						2						1					

