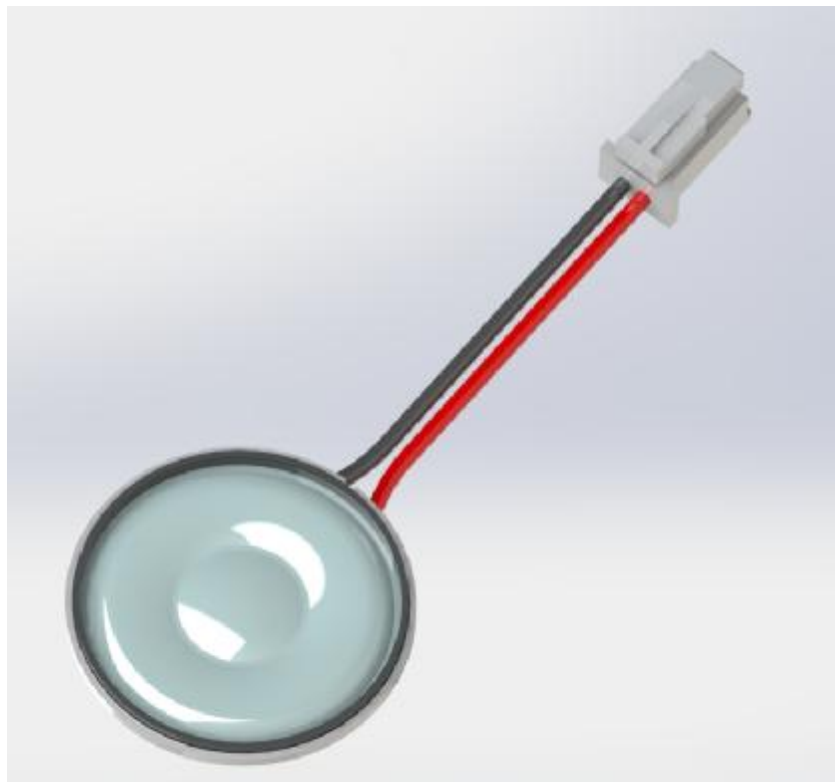
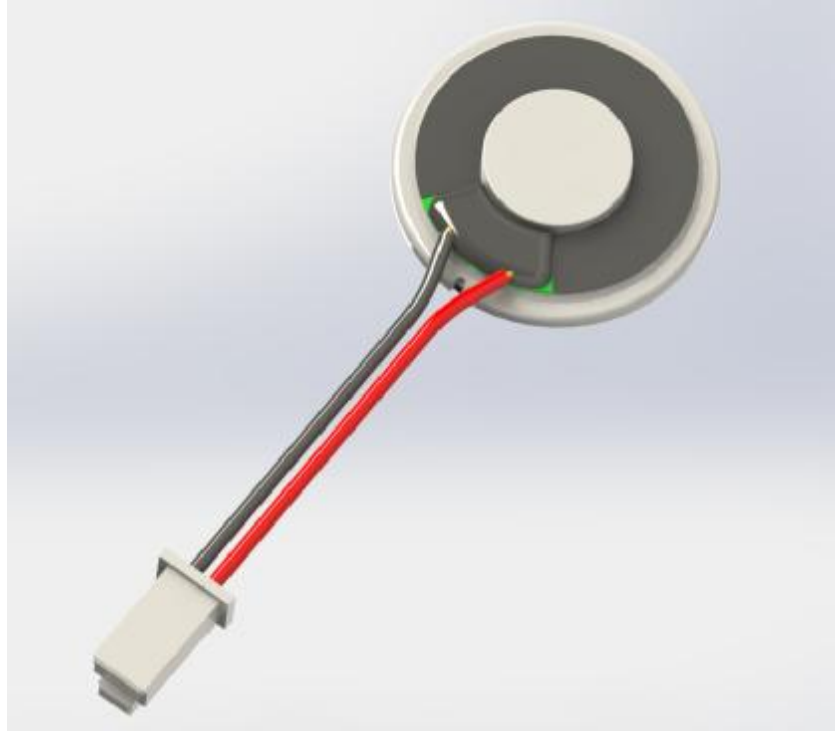


# SPECIFICATION

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	

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 E-Mail: [Info@be-star.com](mailto:Info@be-star.com)  
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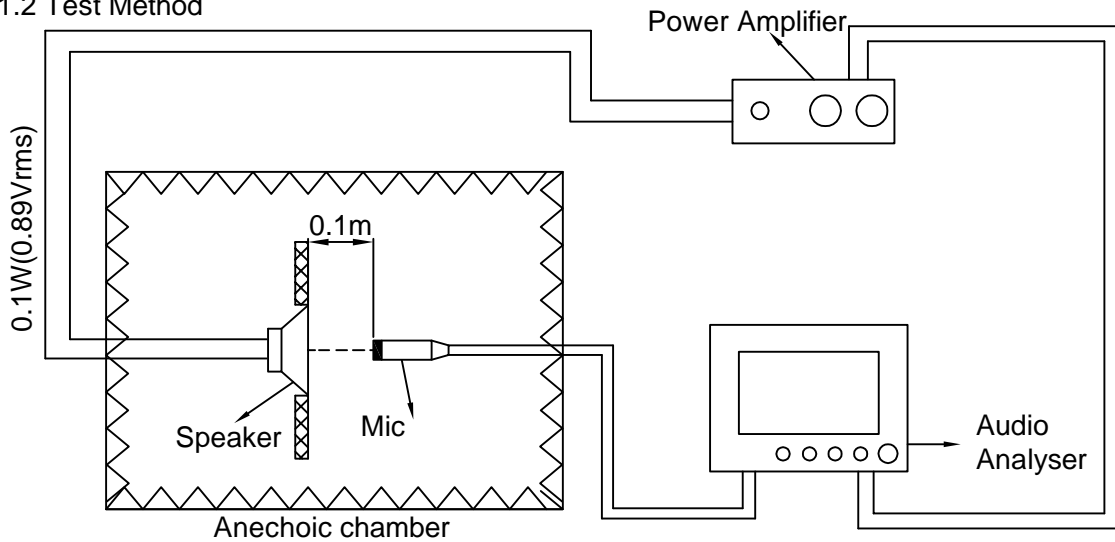
# BMS28-12B-08H05W135-5035

## 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

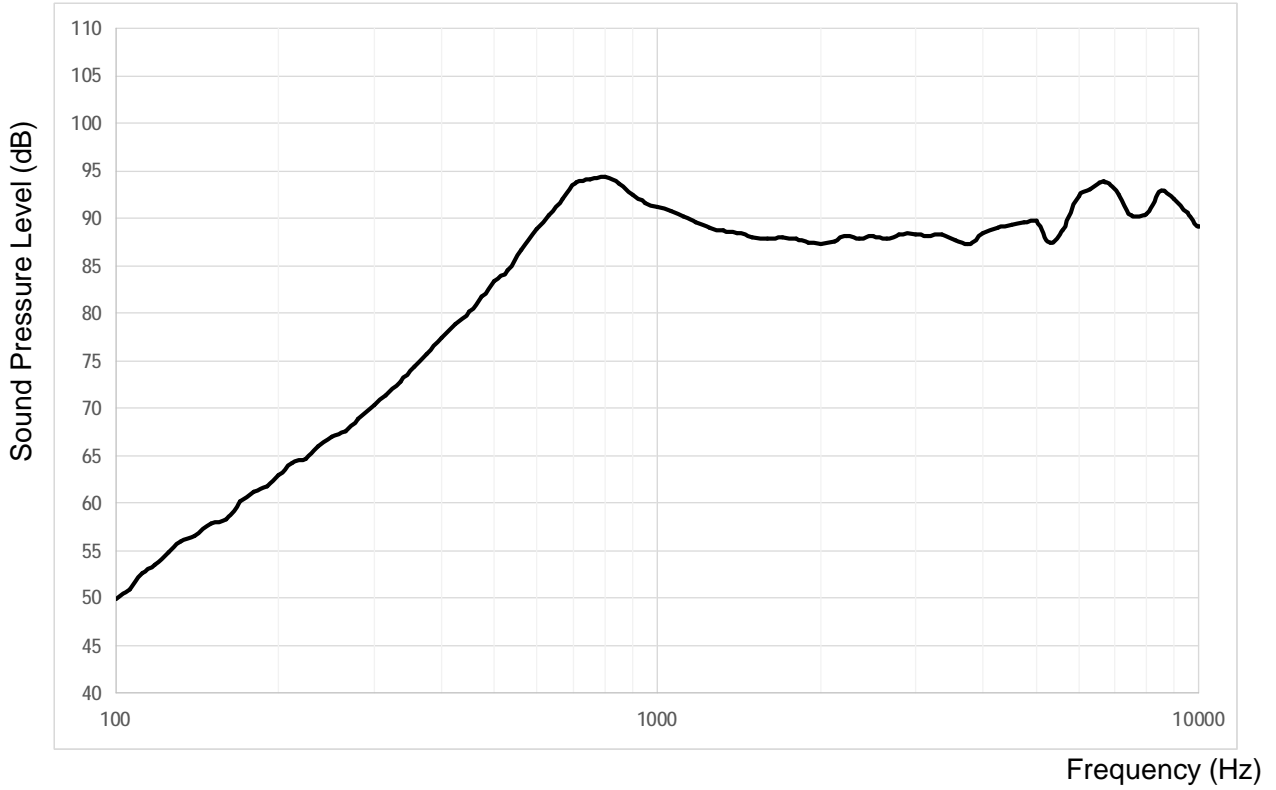


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**BMS28-12B-08H05W135-5035**

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.

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

1.4 Total Harmonic Distortion (only for reference)

A: Frequency Response Magn 0 dB re 20.00  $\mu$ Pa/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.

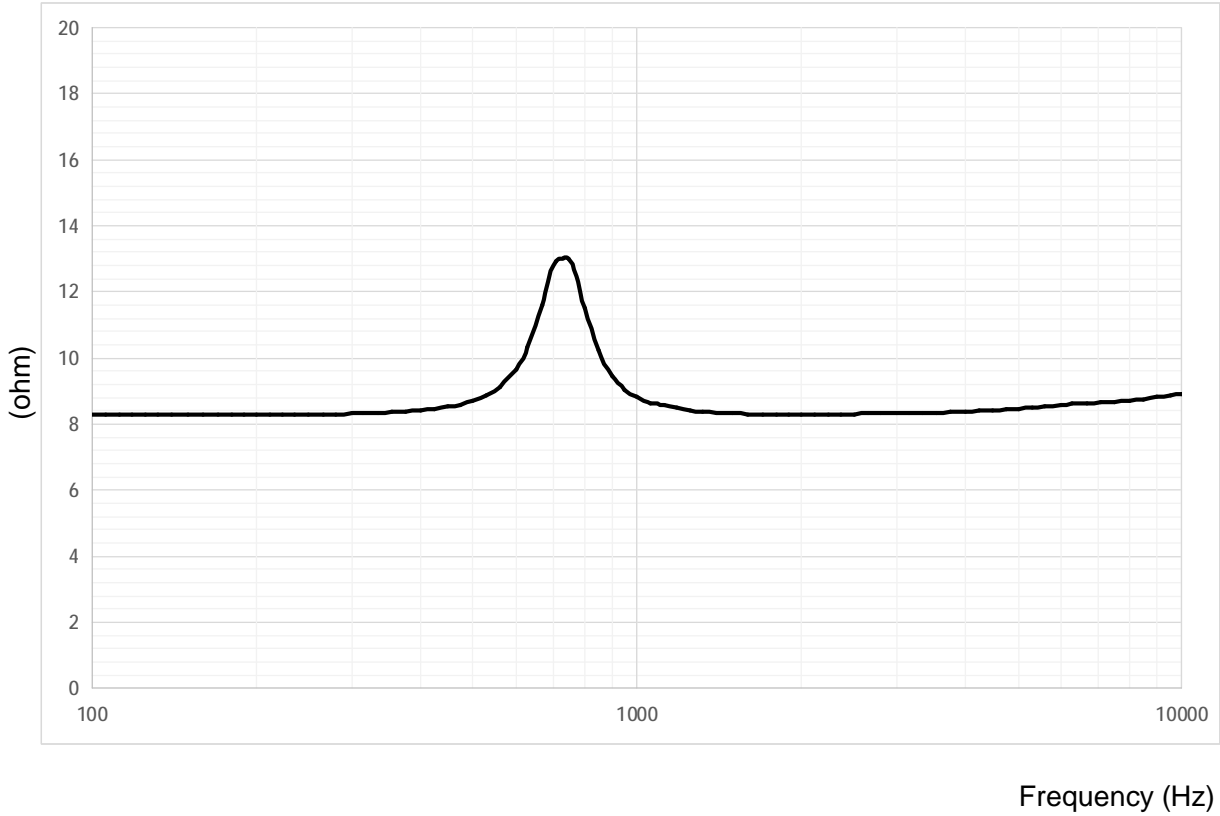
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1.5 F0 Curve (only for reference)

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 1.2 and parameters according chapter 1.5

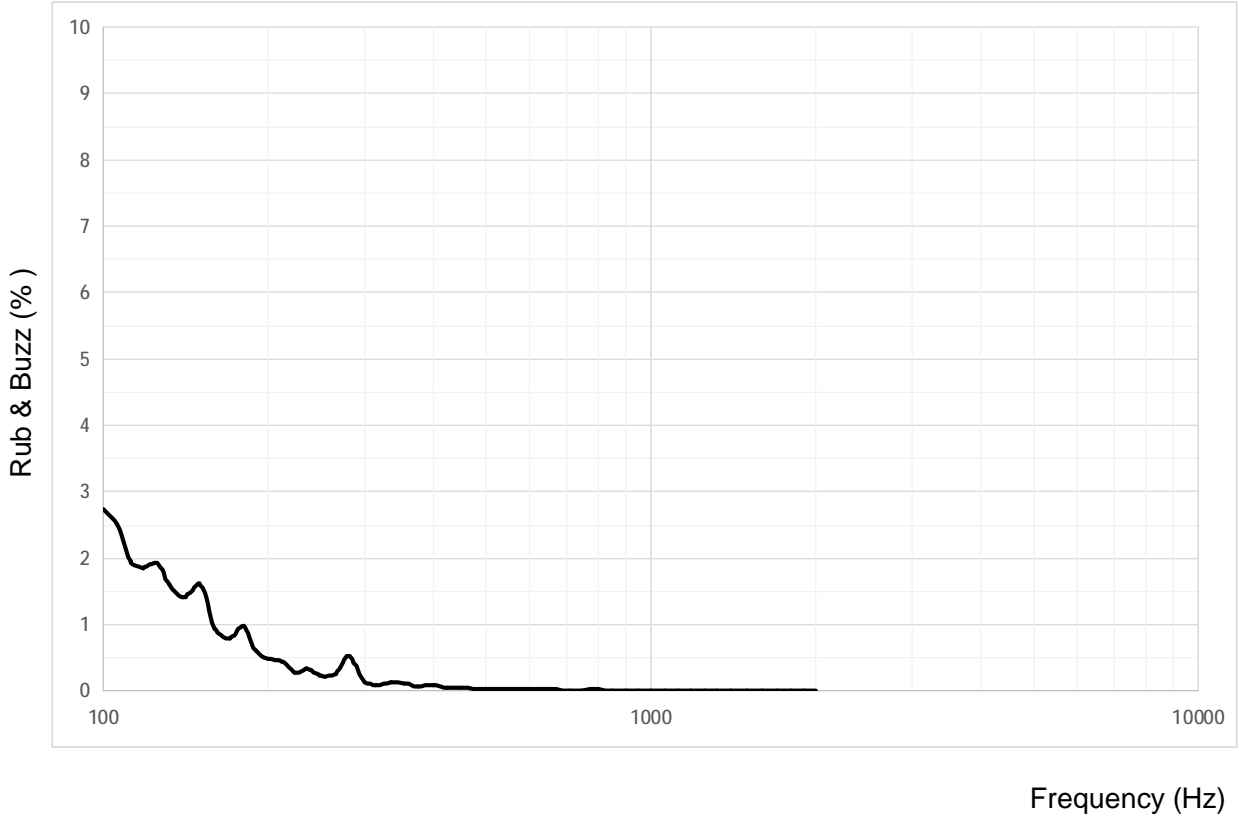
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**BMS28-12B-08H05W135-5035**

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

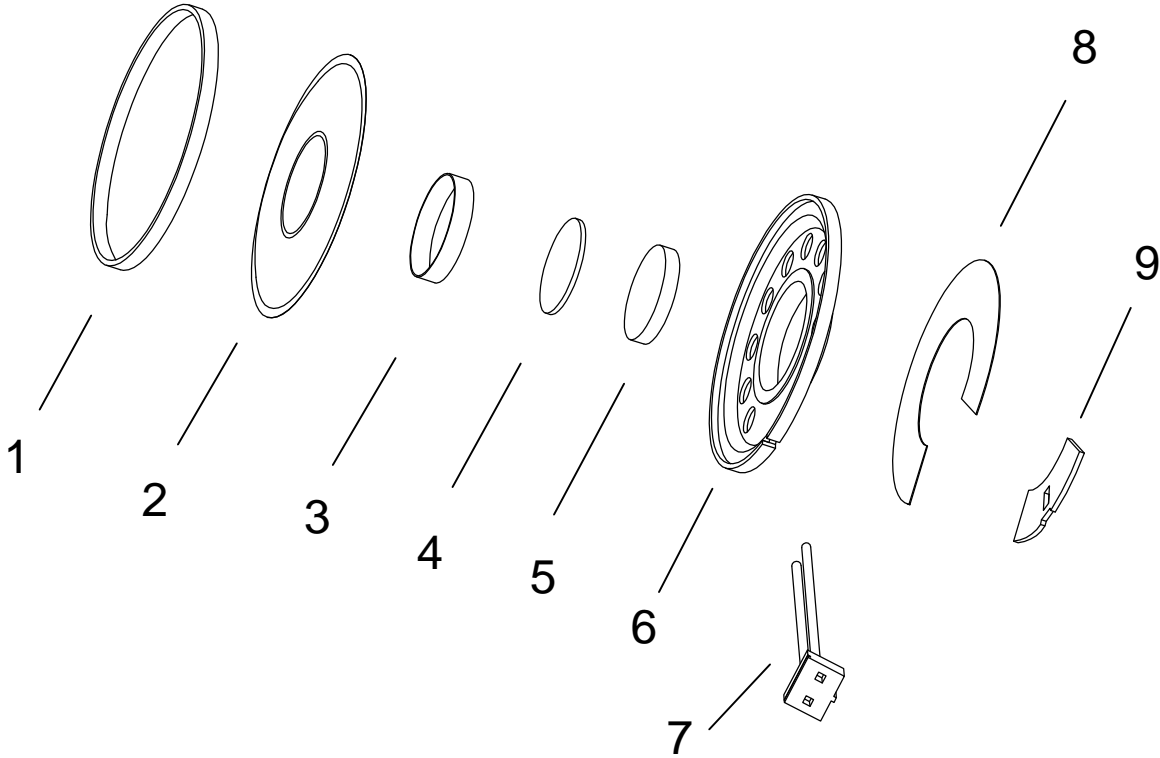
R&B is measured according test set up in chapter 1.2 and parameters according chapter 1.6

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**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

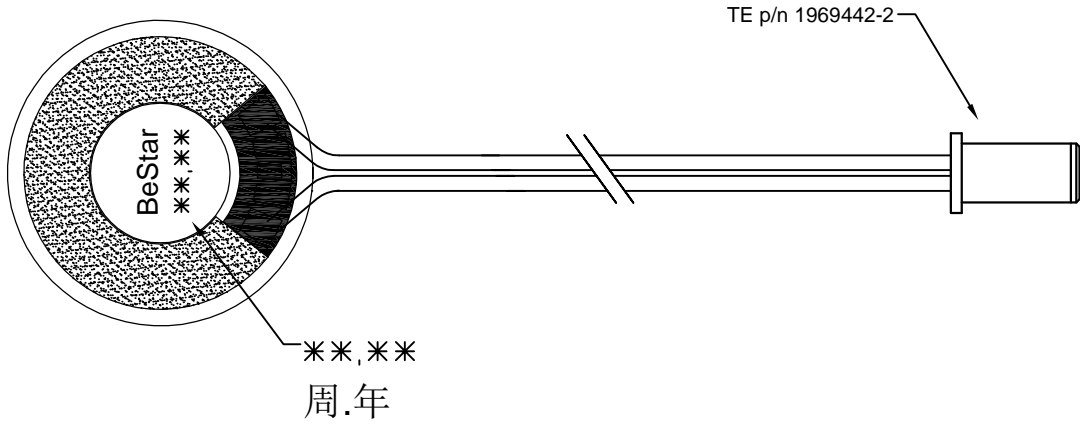
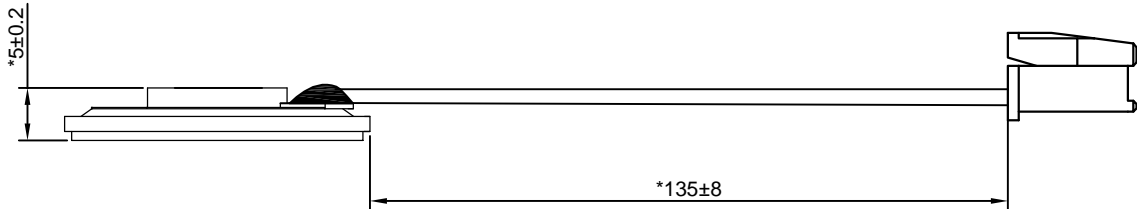
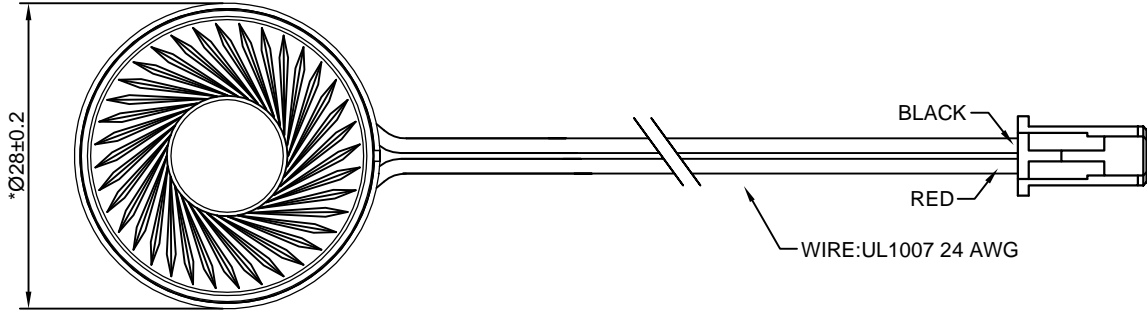
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**BMS28-12B-08H05W135-5035**

**3. Drawing**



unit:mm  
tolerance:±0.3

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## 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

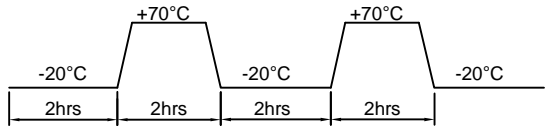
Temperature -20±3°C  
 Duration 96hrs

### 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.

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5 Packing

**TBD**

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