



**DEVETECH ELECTRONICS CO. LTD**

**DYNAMIC SPEAKER  
CUSTOMER: DACHS ELECTRONICA  
P/N: DVS5090R8F200P2**

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<b>CONTENTS</b>		
<b>N°</b>	<b>Contents</b>	<b>Page</b>
1	Revision	2
2	Scope	3
3	General Characteristics	3
4	Electrical and Acoustic Characteristics	3
5	Reliability Test	4
6	Measurement Method and Frequency Response Curve	5
7	Dimensions	6
8	Packing	7

## 1. Revision

<b>Rev. No</b>	<b>Date</b>	<b>Page</b>	<b>Description of Revision</b>
1.0	21/31/2016		Preliminary



## 2. Scope

This document contains required environmental, electrical, acoustic, mechanical, package and reliability test requirements.

## 3. General Characteristics

2.1 Out-Diameter: 50x90mm

2.2 Height: 33mm

2.3 Weight: 40g

2.4 Operating Temperature: -20~+60°C without loss of function

2.5 Store Temperature: -30~+60°C without loss of function

## 4. Electrical and Acoustic Characteristics

Test condition: 15 ~ 35 °C Temperature: 25% ~ 75% RH, 86~106 kPa  
Refer to IEC60268-1

	Items	Specification
1	Impedance	8 Ω ± 15% (1Vrms at 2KHz)
2	Sound Pressure Level	88 dB ± 3dB (0.5m/1w at 0.6, 0.8, 1.0, 1.2kHz average)
3	Resonance Frequency (fo)	200 Hz ± 20% at 1V
4	Frequency Range	fo~10KHz
5	Input Power	Rated 2 W / Max. 5 W
6	Distortion	<5% at 1KHz 1W
7	Buzz and Rattle	Should not be audible buzzes, rattles when the 4V sine wave signal swept at frequency range.
8	Polarity	When a positive DC current is applied to the voice coil terminal marked (+) , the diaphragm shall move to forward.

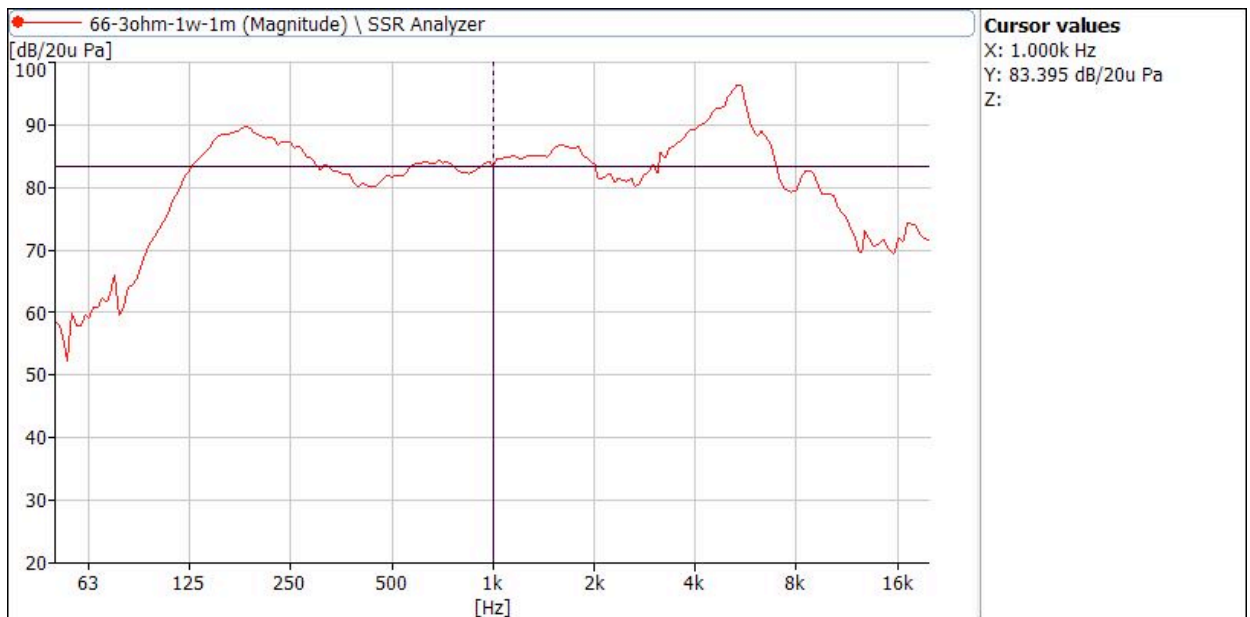
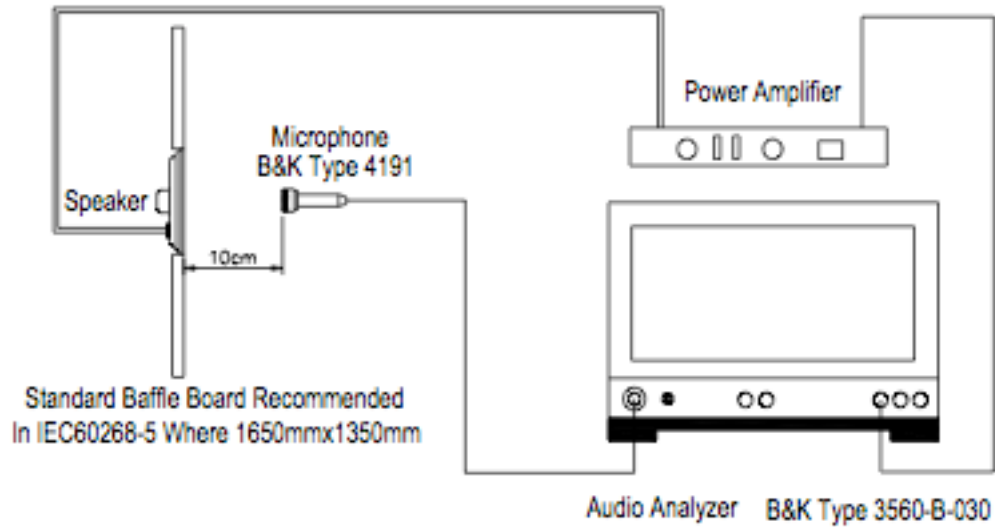
## 5. Reliability Test

After test (1~7item), the speaker S.P.L difference shall be within  $\pm 3\text{dB}$ , and the appearance not exist any change to be harmful to normal operation.

No	Items	Specification
1	High Temp. Test	Keep 12 hours at $+60\pm 3$ °C, and leave 3 hours in normal temperature and then check.
2	Low Temp. Test	Keep 12 hours at $-30\pm 3$ °C, and leave 3 hours in normal temperature and then check.
3	Humidity Test	Keep 12 hours at $-30\pm 3$ °C, relative humidity 85 to 90% and leave 4 hours in normal temperature and then check.
4	Thermal Shock Test	Each temperature cycle shall consist of 1 hour at $+25\pm 3$ °C followed by 1 hour at $+60\pm 3$ °C, and followed by 1 hour at $-30\pm 3$ °C with a 20 to 40 minutes transition time between each 2 temperature extremes. The test duration is for 3 cycles.
5	Vibration Test	Being applied vibration of amplitude of 1.5mm with 10-55-10Hz band of vibration frequency, X.Y.Z. 3 direction. 2 hours each, total 3 hours.
6	Drop Test	Free drop from 1m high to a board 20mm thick hard wood board and has no mechanical damage. Total 3 times.
7	Load test	Loading white noise with input rate power for 24 hours, then placed in natural condition for 1 hour and then check.

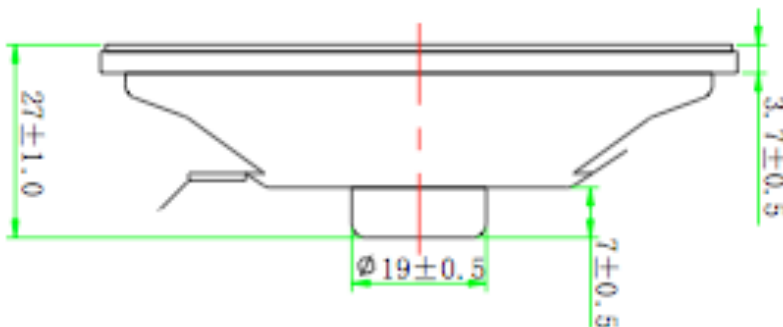
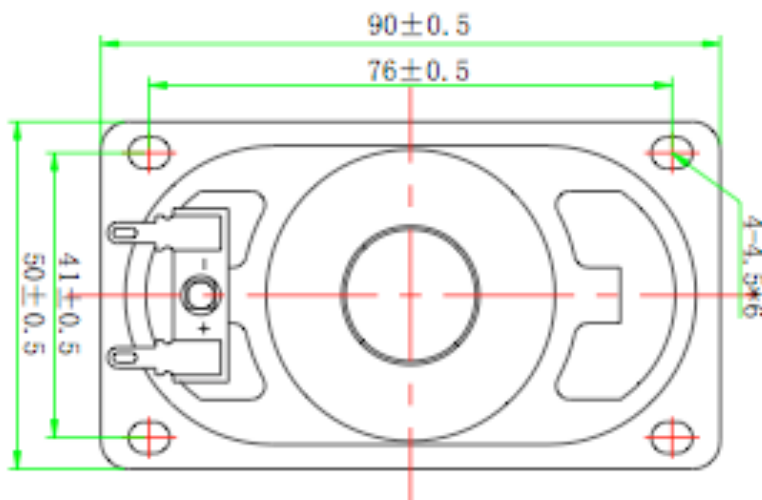
## 6. Measurement Method and Frequency Response Curve

### Standard test condition of speaker



## 7. Dimensions. Magnet out Plastic frame

Unit: mm Tolerance:  $\pm 0.2$





## 9. Packing

Each minimum package unit of products shall be in a carton box and it shall be clearly marked with part number, quantity and outgoing inspection number. There shall be no mechanical damage on products during in storage.

### NOTES

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