



# 1797439 8OHM, 27MM ENCASED MINIATURE SPEAKER

SPEAKERS

### Specifications

1797439

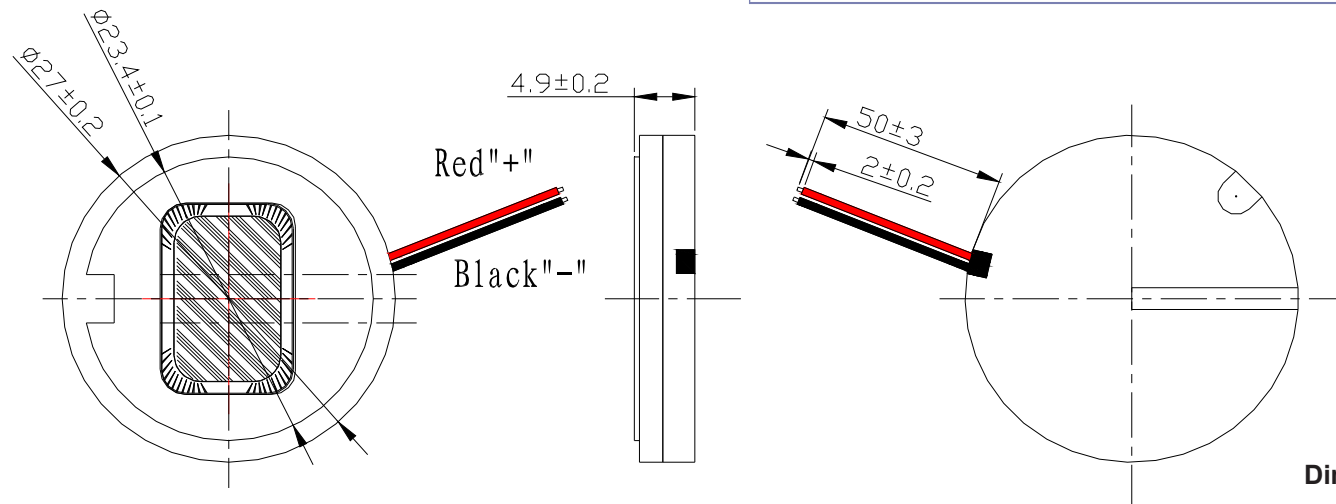
Rated impedance (2.53Vrms at 2kHz)	8±20%Ω
Rated power	0.8W
Maximum power	1.0W
Resonant frequency (According to IEC 268-5)	850±15%Hz/2.53Vrms
Frequency range	500-20,000Hz
Sound pressure level at 0.8W/0.1m at 2kHz	90±3dB
Total harmonic distortion (at 2KHz/0.8W/10cm)	≤10%Max
Operating temperature	-25~+75°C
Weight	3g

### Material

Frame & Front cover - PPA	Plate - SPCC
Diaphragm - PEEK	Magnet - NdFeB
Voice coil - Copper Wire	Yoke - SPCC
Solder Joints - SUS (stainless steel)	Plastic - PC & ABS

### Fixing

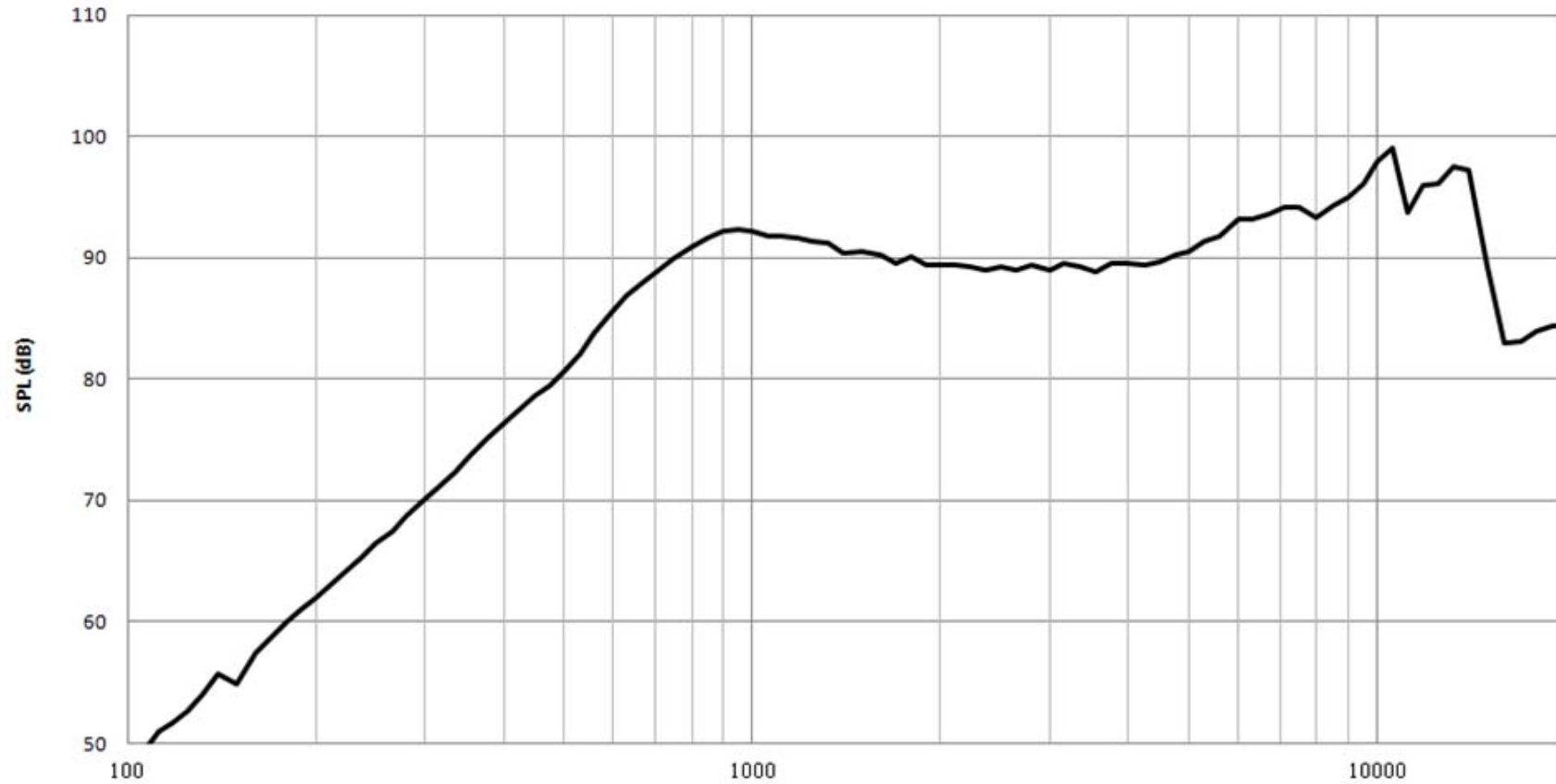
Wire: 1571 32# Red & Black



Dimensions Unit: mm±0.2

# ABS-247-RC - Frequency Response Curve

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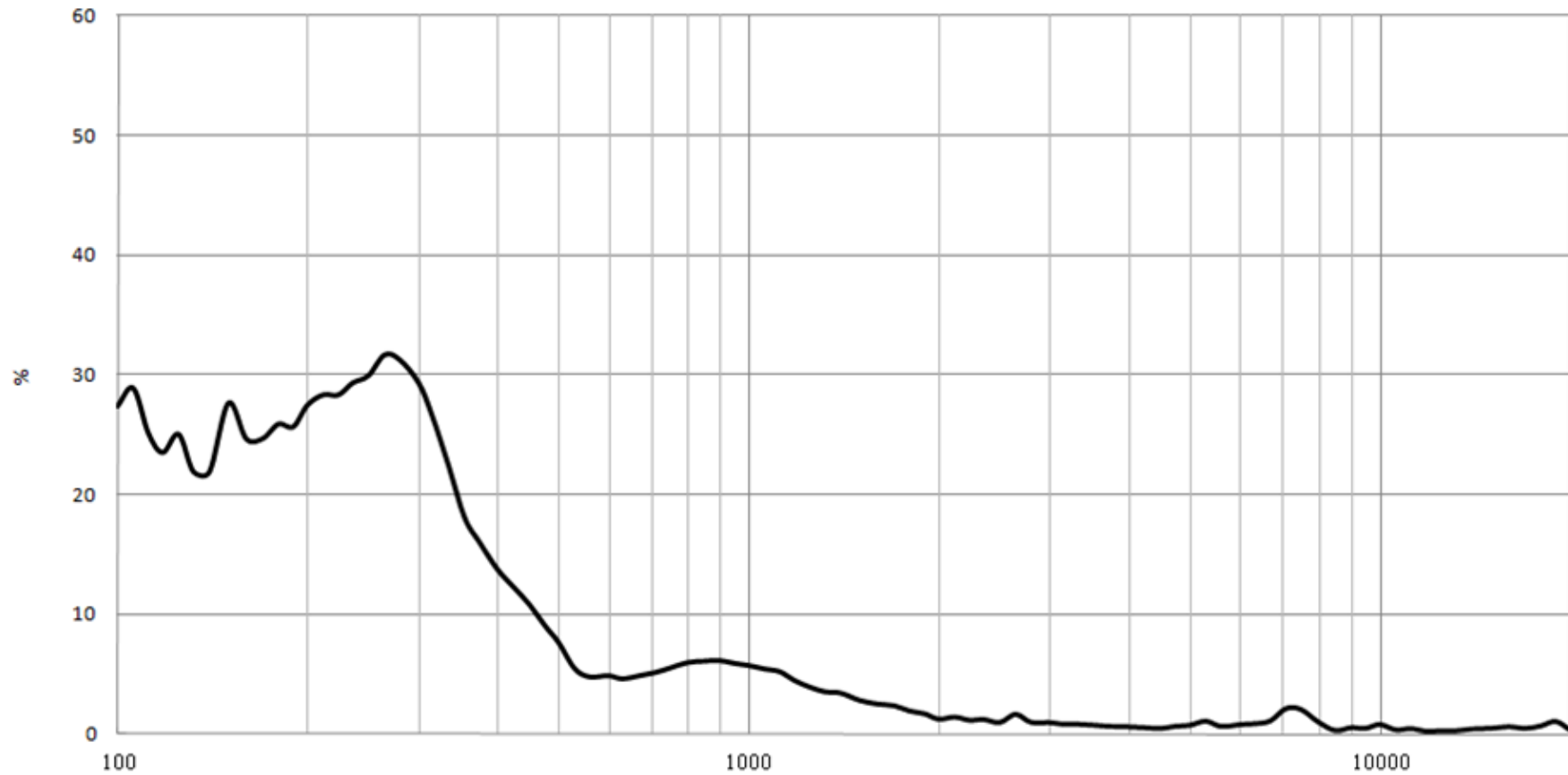
Unit 1 Beechwood Clump Farm Industrial Estate Tin Pot Lane Blandford Dorset DT11 7TD

Telephone 01258 456360 Facsimile 01258 459194 Email [sales@abcomponents.co.uk](mailto:sales@abcomponents.co.uk)

[www.abcomponents.co.uk](http://www.abcomponents.co.uk)

## ABS-247-RC - Typical THD Curve

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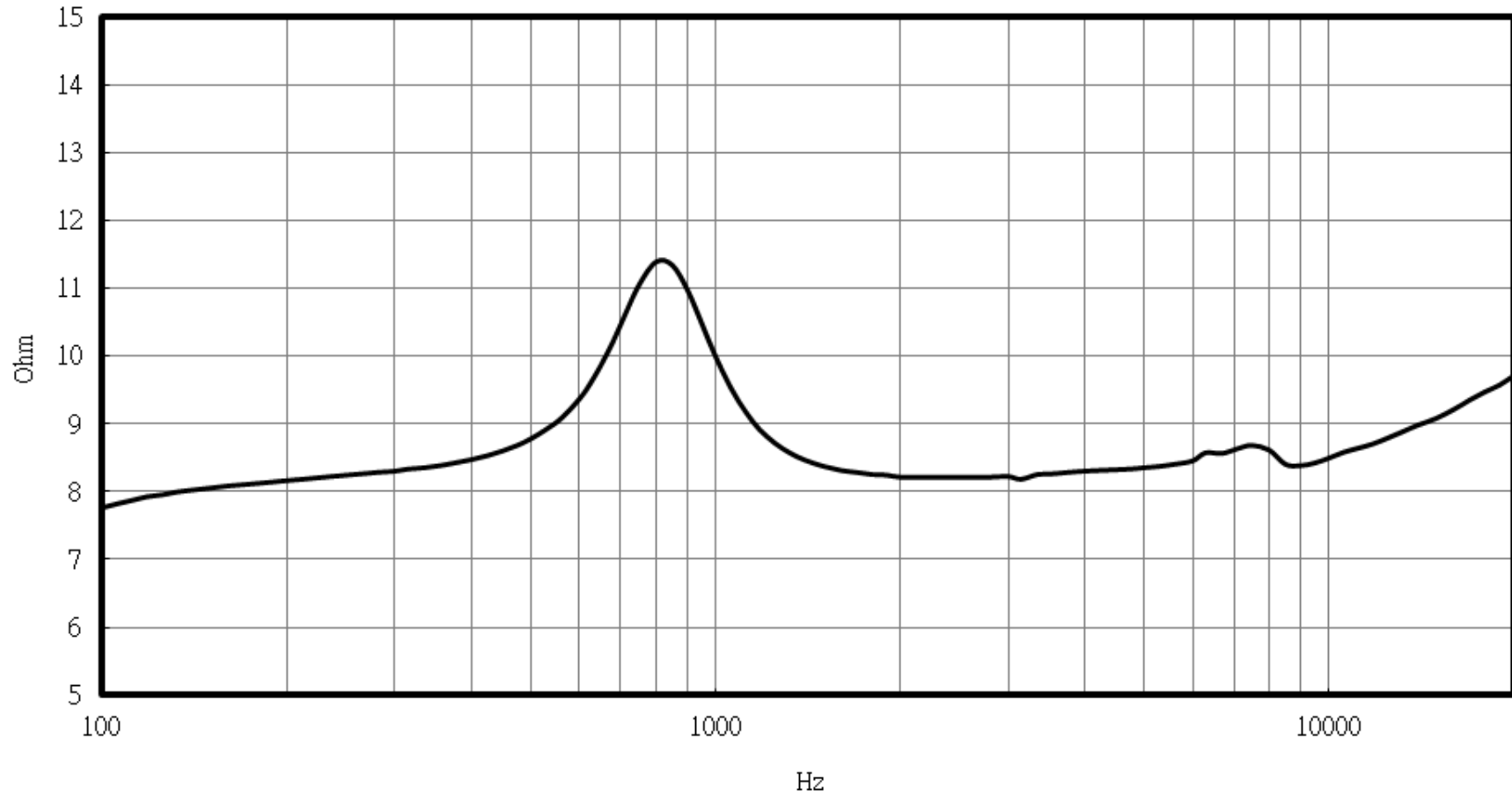
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# ABS-247-RC - Typical Impedance Curve

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**Test ClimTest Climatic Condition**

Ambient temperature: 15 °C ~ 35 °C, preferably at 20 °C  
 Relative humidity: 25% to 75%  
 Air pressure: 86kPa ~ 106kPa  
 Refer to IEC 268-1

**Test environment**

Test method of SPL, Frequency Response Curve and THD

The speaker module and B&K microphone module should be fixed on the fixed bar in the acoustic anechoic chamber. The distance between B&K 4191 microphone module and speaker module should be 10 cm. the driving signal is 2.53 Vrms sinusoidal signal and sweep from 20 Hz to 20k Hz with 1/12 Octave (ISO R40) sequence

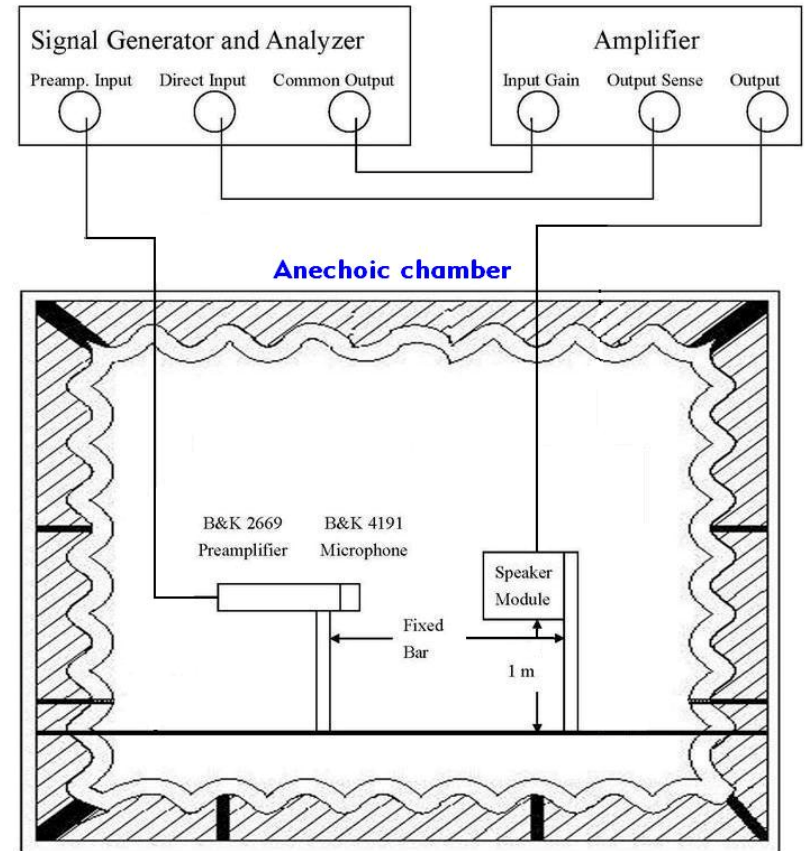
**General Reliability test**

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 4 hours at least before performance testing. After reliability test, all samples must be meet the requirements specified in the document. The quantity of the test is 10 pcs if not stated otherwise.

**Drop test**

DUTs shall be mounted in a 100g fixture, drop samples 1.5m three times in each direction. Total - 18 times

**Block diagram of test environment**



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**Vibration**

10 to 50 Hz within 1min / Amplitude 1.5mm / Duration: 30minutes in each of 3 axes.

**Rated Noise Power**

Input shall be simulated program signal in accordance with IEC 60268-1 with crest factor around 1.8 to 2.2 in rated frequency range with Rated Power for 100 hours.

Temp.: 65 °C

**Short-term Maximum Power**

Input shall be simulated program signal in accordance with IEC 60268-1 with crest factor around 1.8 to 2.2 in rated frequency range. And the signal will be 1 second on, 59 second off, total 60 cycles ( Refer to IEC 268-5).

**Cold Test**

Temp.: -25 °C / Duration: 16 hours.

**Heat Test**

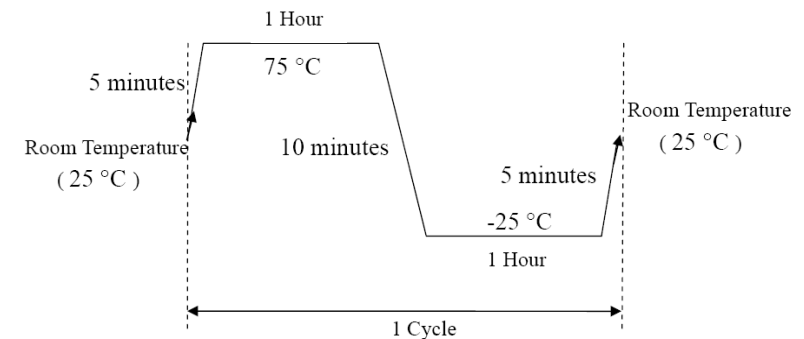
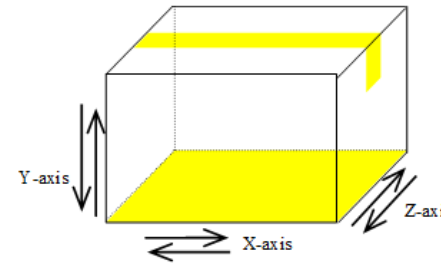
Temp.: 75 °C / Duration: 16 hours.

**Humidity Test**

Temp.: 40 °C / R.H.: 95 % / Duration: 48 hours.

**Temperature Cycle Test**

25 °C to 75 °C transition time: 5 minutes → 75 °C remains 1 hour → 75 °C to -25 °C transition time: 10 minutes → -25 °C remains 1 hour → -25 °C to 25 °C transition time: 5 minutes ( 2 hours and 20 minutes per cycle ) / 4 cycles



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