

BMR35C10-4B Datasheet

1. Overview

The BMR35C10-4B (SKU: DYN) is a compact full-range Balanced Mode Radiator (BMR®) drive unit. It combines the benefits of Tectonic bending wave technology and pistonic modes of operation. The small form-factor is ideally suited for compact products that require a full-range drive unit, room filling sound and a high-performance acoustic solution.

- Power Handling: 10 W
- 20 mm Voice Coil Diameter
- Ø 54 mm X 25 mm Height
- Neodymium Motor Structure



Figure 1.1

**Product code and manufacture date is printed on the back of the return cup*

2. Applications

- Conferencing Systems
- IoT devices
- Bluetooth Audio
- Smart Speakers and TVs
- Desktop Audio
- Soundbars and monitors

3. Specifications

Transducer Performance		Parameter	Nominal	Unit
Frequency Response ($\pm 6\text{dB}$)	150 Hz ~ 30 kHz	Fs	170	Hz
Speaker Sensitivity (1 Watt / 1 meter)	80 dB	Sd	10.75	cm ²
Rated Maximum SPL (1 Meter)	90 dB	Mms	1.14	g
Speaker Nominal Impedance	4 Ω	Cms	0.76	mm/N
Power Handling (IEC268-5)	10 W	Rms	0.35	kg/s
Operating Temperature	-20 to +55 °C	Re	4	Ω
Voice Coil Diameter	20 mm	Bl	2.24	T*m
Voice Coil Material	CCAW	Le	0.09	mH
Diaphragm Material	Doped Paper Composite	Qts	0.78	
Max Linear Excursion*	2.6 mm Peak to peak			
Max Mechanical Excursion	8 mm Peak to peak	Max Surround Frontal Movement		2.45 mm

**From Klippel LSI*

3.1. On-Axis SPL and Impedance (Measured)

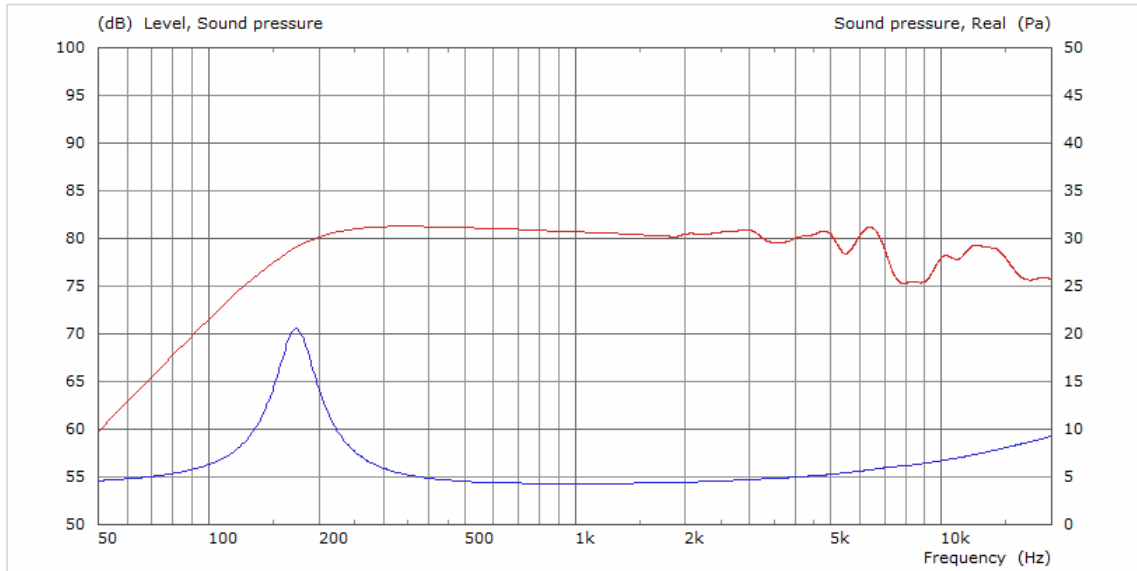


Figure 3.1.1 – Red: On-Axis SPL at 1W/1m (1/3-octave smoothed/spliced*/anechoic). Blue: Electrical Impedance

3.2. Sound Power Response (Measured over 0 – 90°)

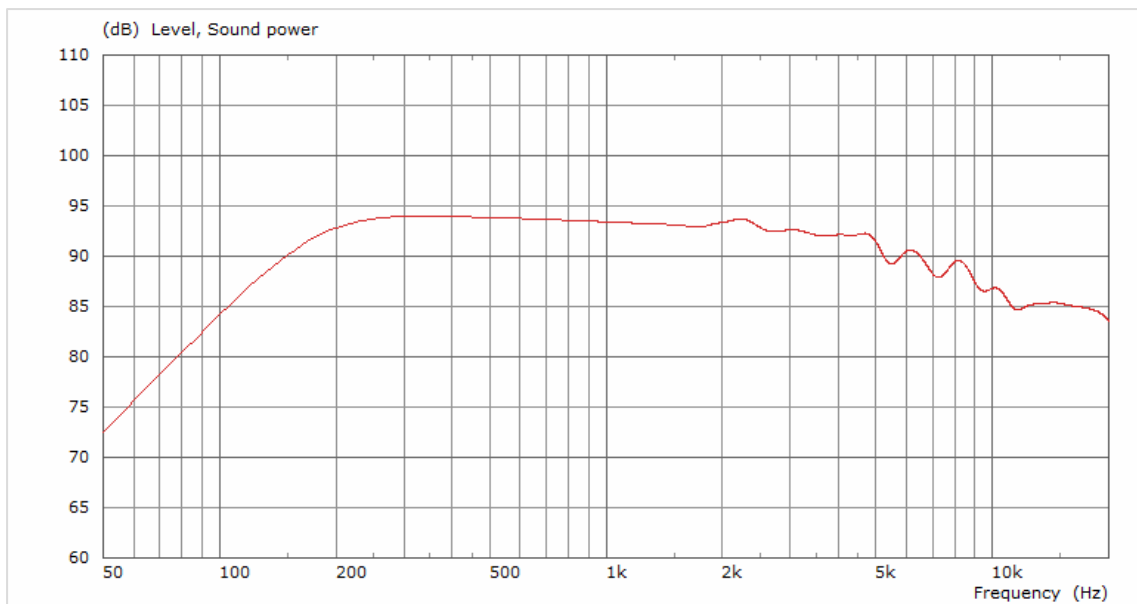


Figure 3.2.1 – Sound power calculated from SPL measurements, 1W/1m (1/3-octave smoothed/spliced*)

**Acoustic measurement data is shown above spliced frequency. Lower frequency performance is derived from diaphragm scan using Polytec PSV500 scanning vibrometer.*

3.3. Polar Response (Measured)

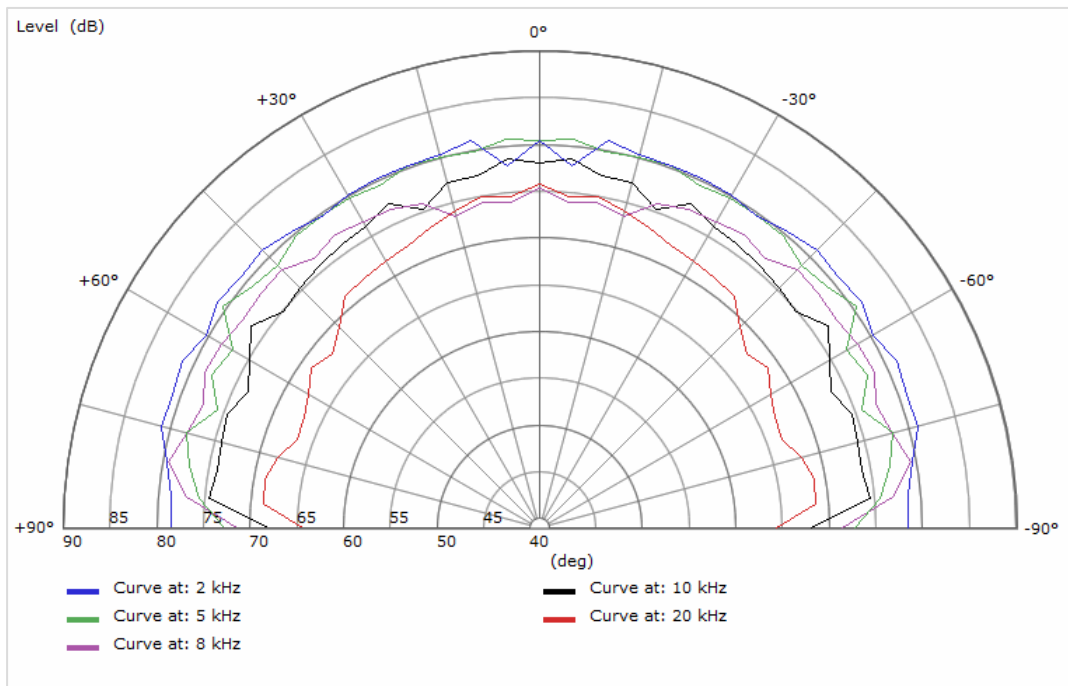
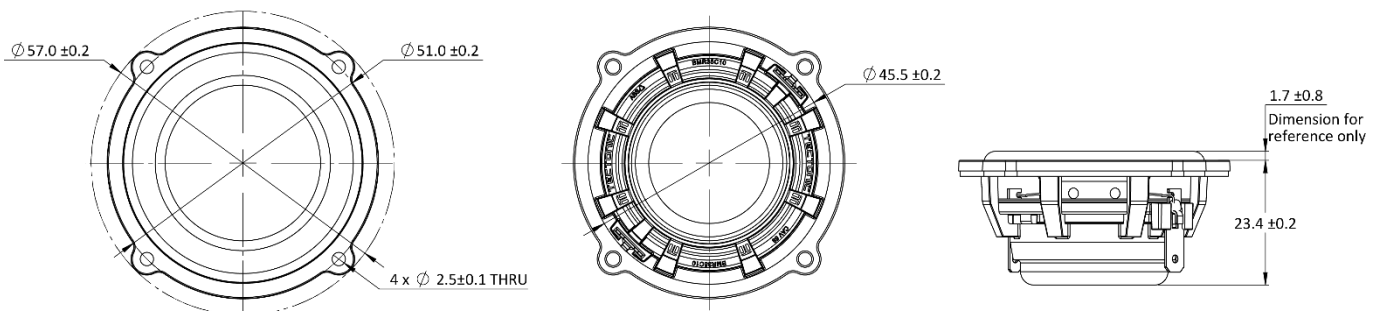


Figure 3.3.1 – Polar response, angle/ dB SPL, 1W/1m (1/3-octave smoothed / anechoic)

3.4. Product Dimension



Note:

- Volume Displacement: 17.5 cc
- All dimensions are in millimeters

Figure 3.4.1 – External product dimensions

4. Appendix

4.1. Klippel LSI

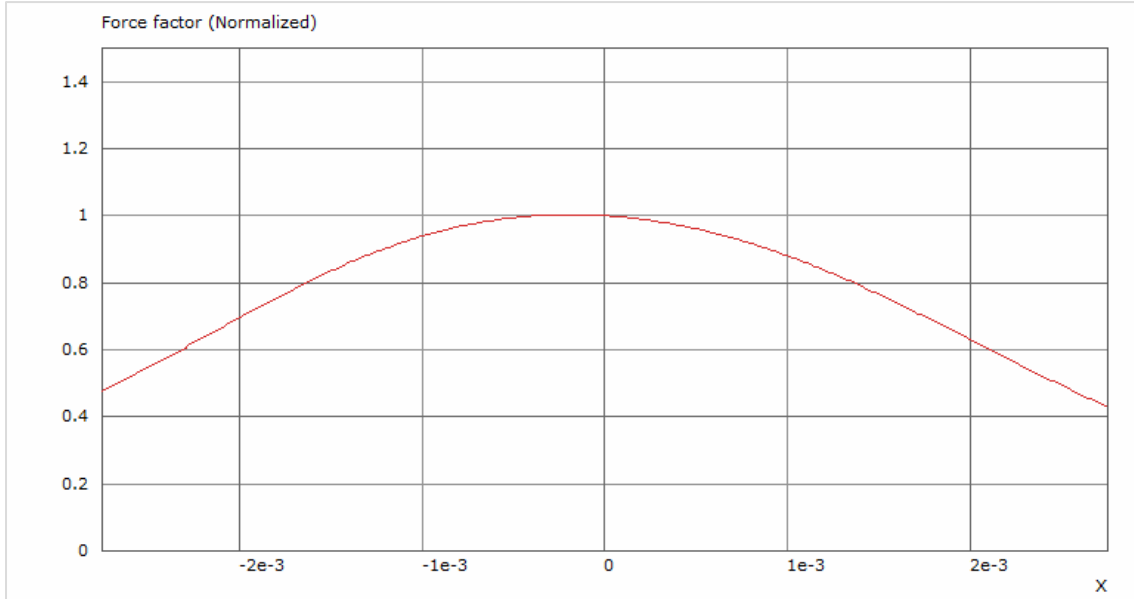


Figure 4.1.1 – BI (x)

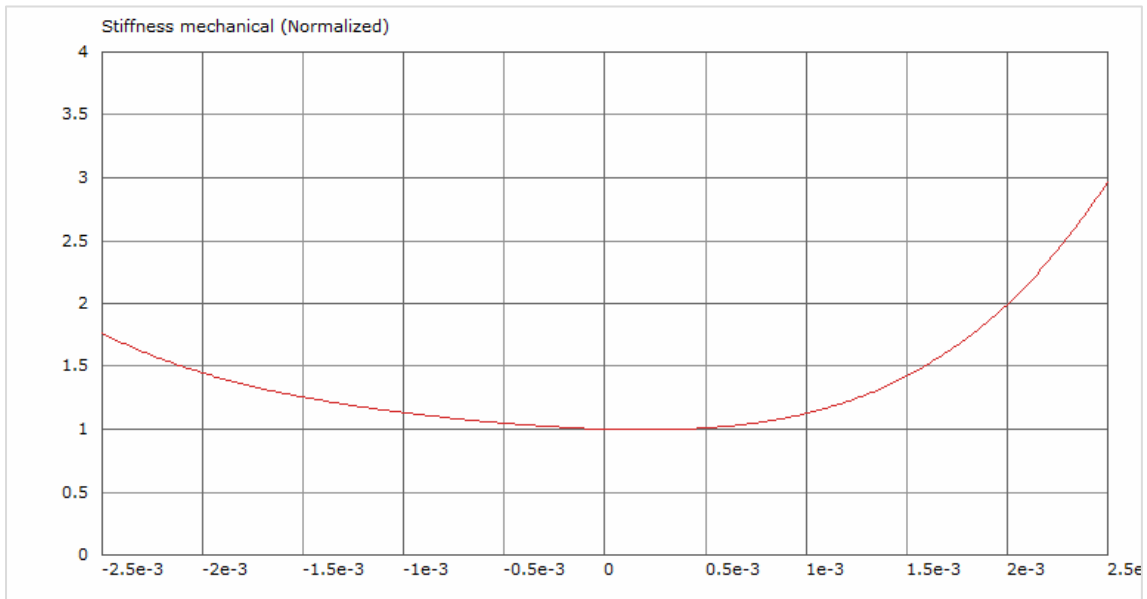


Figure 4.2.1 – Kms (x)