

## HiBM65C20F-8 Balanced Mode Radiator



### Features

- Wide bandwidth and wide directivity
- Impedance:  $8\Omega$
- Dimensions: 100mm (max OD)
- Depth: 57mm (TBC)
- Mass: 685g

### Applications

- Home theatre systems
- Computer speakers
- Sound bars
- Mini hi-fi systems

### Description

The HiBM65C20F-8 Balanced-Mode Radiator (BMR) is an audio drive unit with an extended frequency response and wide directivity compared with a conventional drive unit. It combines the benefits of HiWave bending-wave technology and pistonic modes of operation. It is ideally suited for compact audio applications that require a full-range, high performance acoustic solution. It features an advanced ferrite motor system for low cost.

### Parameters (predicted)

| Parameter       | Description                  | min  | typ   | max  | Units      |
|-----------------|------------------------------|------|-------|------|------------|
| $R_e$           | DC resistance                | -10% | 7.20  | +10% | Ohms       |
| $L_e$           | Inductance                   | -10% | 0.055 | +10% | mH         |
| $BL$            | Force factor                 |      | 4.33  |      | Tm         |
| $f_s$           | Resonance frequency          | -20% | 86    | +20% | Hz         |
| $d_{Drv}$       | Voice coil diameter          |      | 25.4  |      | mm         |
| $M_{ms}$        | Moving mass                  |      | 5.25  |      | g          |
| $C_{ms}$        | Compliance                   |      | 0.65  |      | $mmN^{-1}$ |
| $R_{ms}$        | Suspension Loss              |      | 0.58  |      | $Nsm^{-1}$ |
| $S_d$           | Radiating Area               |      | 37.2  |      | $cm^2$     |
| $X_{mech\ max}$ | Maximum coil excursion (p-p) |      | 10.0  |      | mm         |
| $V_{AS}$        | Equivalent volume            |      | 1.26  |      | L          |
| $Q_{ms}$        | Mechanical quality factor    |      | 4.90  |      |            |
| $Q_{es}$        | Electrical quality factor    |      | 1.09  |      |            |
| $Q_{ts}$        | Total quality factor         |      | 0.89  |      |            |

Operating conditions

| Condition                                       | Value         |
|---|---------------|
| Continuous power handling (weighted pink noise) | 20W (TBC)     |
| Burst power handling (weighted pink noise)      | >40W (TBC)    |
| Operating temperature range                     | -20 to 55° C  |
| Audio frequency range                           | 80Hz to 20kHz |

Response

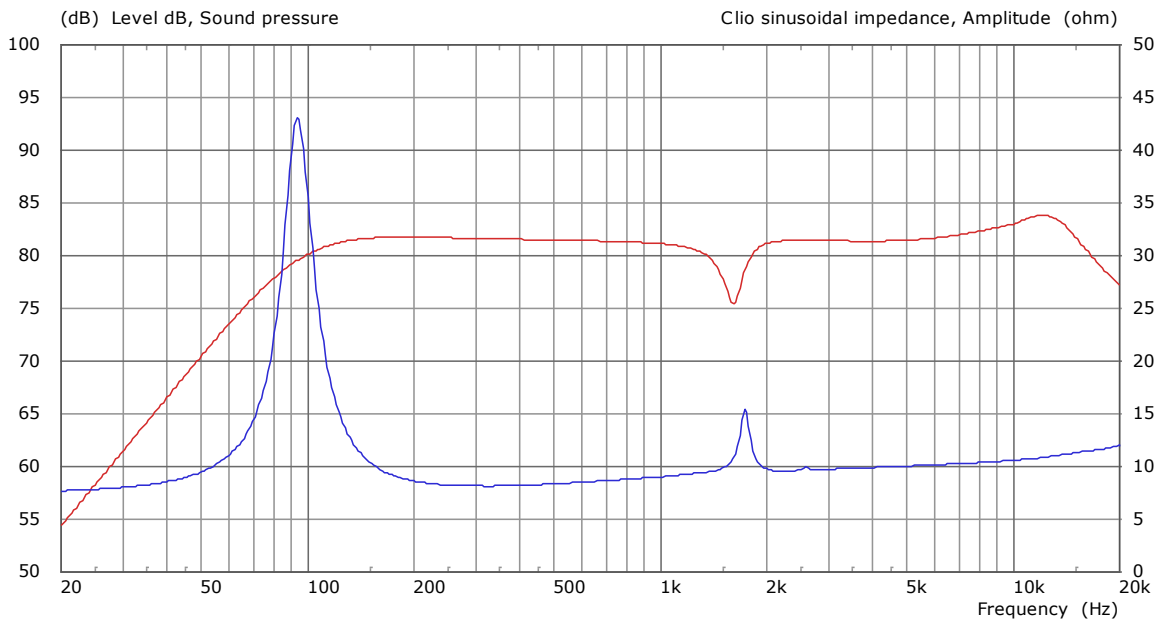


Figure 1. Simulated SPL & impedance vs. frequency

Outline Drawing

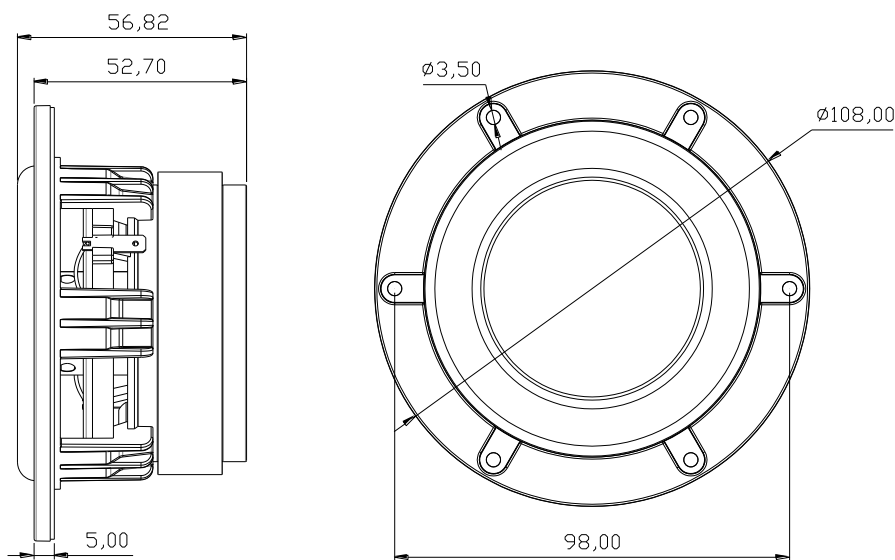


Figure 2. Nominal dimensions