

TEBM65C20F-4 Balanced Mode Radiator

✓ **RoHS**
COMPLIANT



Features

- Wide bandwidth and wide directivity
- Impedance: 4Ω
- Dimensions: 108mm (max OD)
- Depth: 57mm
- Mass: 685g

Applications

- Home theatre systems
- Wireless speakers
- Sound bars
- Hi-Fi systems

Parameters

Parameter	Description	min	typ	max	Units
R_e	DC resistance	-10%	3.97	+10%	Ohms
L_e	Inductance	-10%	0.038	+10%	mH
BL	Force factor		3.34		Tm
f_s	Resonance frequency	-20%	87	+20%	Hz
d_{Drv}	Voice coil diameter		25.4		mm
M_{ms}	Moving mass		5.88		g
C_{ms}	Compliance		0.57		mmN ⁻¹
R_{ms}	Suspension Loss		0.44		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		1.11		L
Q_{ms}	Mechanical quality factor		7.23		
Q_{es}	Electrical quality factor		1.14		
Q_{ts}	Total quality factor		0.98		

Description

The TEBM65C20F-4 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 Tectonic 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.

An 8ohm version is also available.

Operating conditions

Condition	Value
Continuous power handling (weighted pink noise)	30W
Burst power handling (weighted pink noise)	>60W
Operating temperature range	-20 to 55° C
Audio frequency range	60Hz to 20kHz
Sound pressure level @ 1W, 1m	80dB

Response

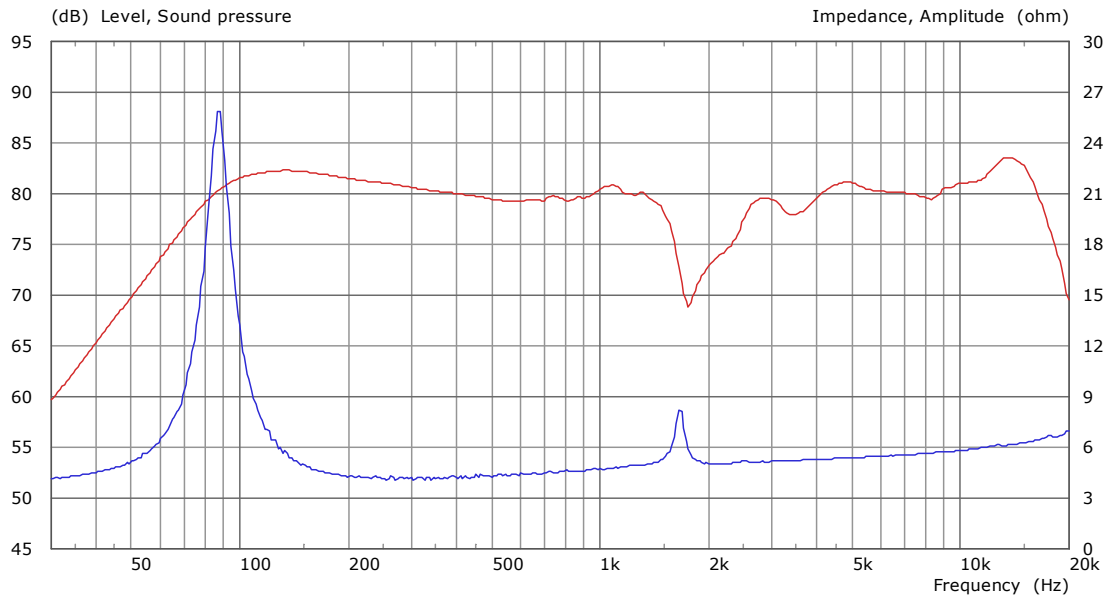


Figure 1. SPL (1W, 1m) & impedance vs. frequency.

Outline Drawing

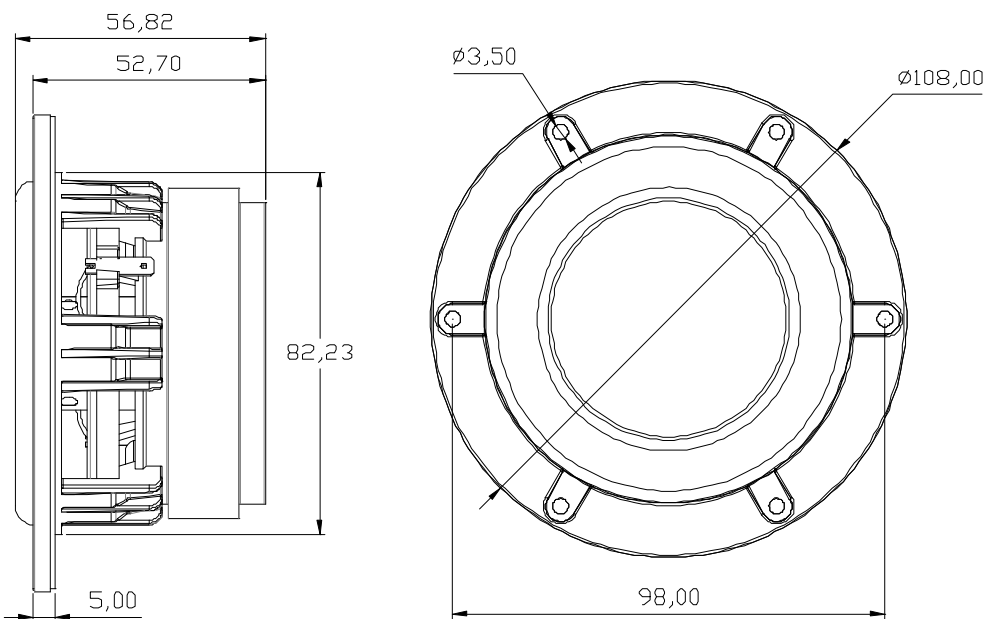


Figure 2. Nominal dimensions