HIBM36S12-4/A Balanced Mode Radiator

✓RoHS
COMPLIANT

Features

- Wide bandwidth and wide directivity
- Impedance: 4Ω
- Dimensions: 65mm x 65mm
- Thickness: 29.7mm
- Mass: 88.2g

Applications

- Docking stations
- Table radios
- Sound bars
- Computer speakers
- Wireless speakers

Description

The HIBM36S12-4/A 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.

This second generation drive unit has the same audio characteristics as its predecessor, with improved response smoothness and linearity at high excursion. An 8Ω version is also available.

Parameters

Parameter	Description	min	typ	max	Units
R_e	DC resistance	-10%	4.5	+10%	Ohms
L_e	Inductance	-10%	0.1	+10%	mH
BL	Force factor		3.2		Tm
f_s	Resonance frequency	-20%	150	+20%	Hz
dDrv	Voice coil diameter		25.4		mm
M_{ms}	Moving mass		1.67		g
C_{ms}	Compliance		0.7		mmN^{-1}
R_{ms}	Suspension Loss		0.5		Nsm^{-1}
S_d	Radiating Area		17.2		cm^2
$X_{mech\ max}$	Maximum coil excursion (p-p)		7.0		mm
S_d	Effective piston area		17.2		cm^2
V_{AS}	Equivalent volume		0.3		L
Q_{ms}	Mechanical quality factor		3.3		
Q_{es}	Electrical quality factor		0.7		
Q_{ts}	Total quality factor		0.6		

Operating conditions

Condition	Value
Continuous power handling (weighted pink noise)	12W (TBC)
Burst power handling (weighted pink noise)	>24W (TBC)
Operating temperature range	-20 to 55°C
Audio frequency range	80Hz to 20kHz

Response

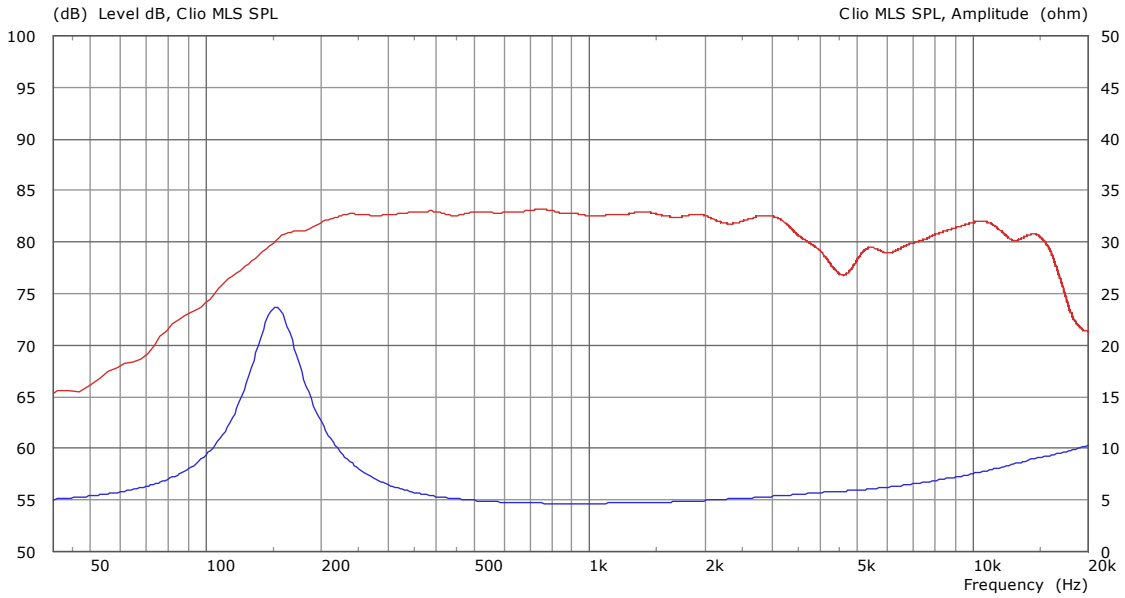

Figure 1. SPL & impedance vs. frequency

Outline Drawing

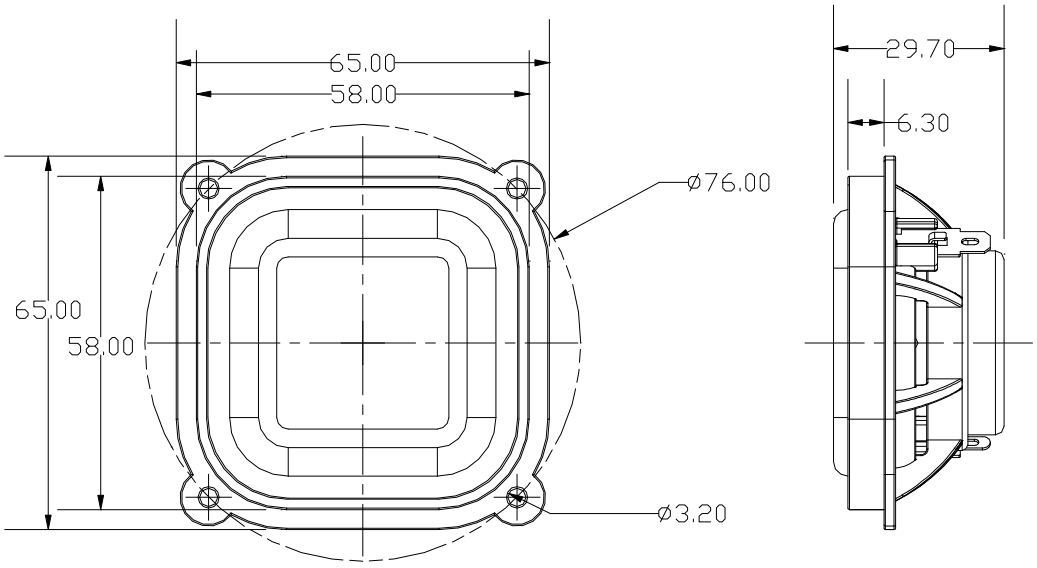

Figure 2. Nominal dimensions