TECTONIC elements ltd.

TEBM98H10M-8
Data Sheet

TEBM98H10M-8 HARP BMR Driver

✓RoHS COMPLIANT

Features

- Wide bandwidth and wide directivity
- Impedance: 8Ω
- Dimensions: 97.4mm x 29.5mm
- Thickness: only 28mm deep.
- Mass: 62g

Applications

- Flat TV speakers
- Sound bars
- Narrow form-factor loudspeakers

Description

The TEBM98H10M-8 High Aspect Ratio Panel Balanced Mode Radiator (HARP 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 Elements bending-wave technology and pistonic modes of operation.

The narrow form-factor is ideally suited for thin flat-panel TV audio applications that require a full-range, high performance acoustic solution.

Parameters

Parameter	Description	min	typ	max	Units
R_e	DC resistance	-10%	8.2	+10%	Ohms
L_e	Inductance (@ 10kHz)	-10%	0.11	+10%	mH
BL	Force factor	-	2.84	-	Tm
f_s	Resonant frequency	-10%	135	+10%	Hz
SPL	Sound Pressure Level @ 1W, 1m	-	77	-	dB
dDrv	Voice coil diameter	-	19.4	-	mm
M_{ms}	Moving mass	-	2.76	-	g
C_{ms}	Compliance	-	0.51	-	mmN^{-1}
R_{ms}	Suspension Loss	-	0.37	-	Nsm^{-1}
$X_{mech\ max}$	Maximum coil excursion (p-p)	-	8.0	-	mm
Sd	Effective piston area	-	19.3	-	cm^2
V_{AS}	Equivalent volume	-	0.26	-	L
Q_{ms}	Mechanical quality factor	-	6.42	-	
Q_{es}	Electrical quality factor	-	2.38	-	
Q_{ts}	Total quality factor	-	1.74	-	

Operating conditions

Condition	Value
Continuous power handling (weighted pink noise)	10W
Burst power handling (weighted pink noise)	20W
Operating temperature range	-20 to 55° C
Audio frequency range	100Hz to 20kHz

Response

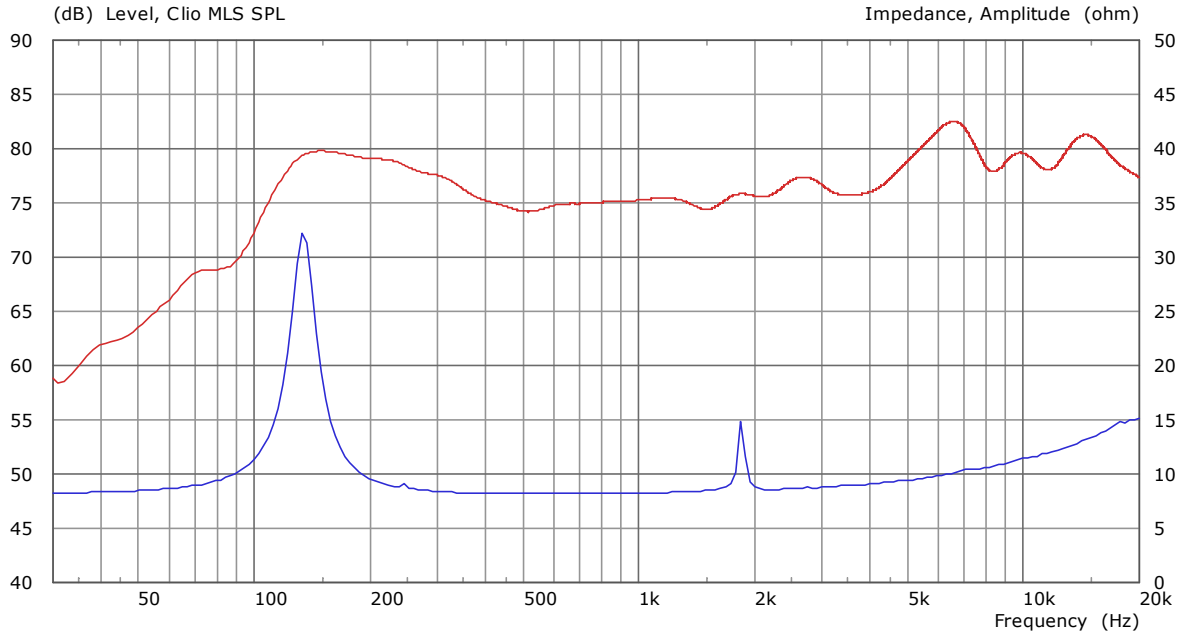

Figure 1. Impedance vs. frequency and SPL

Outline Drawing

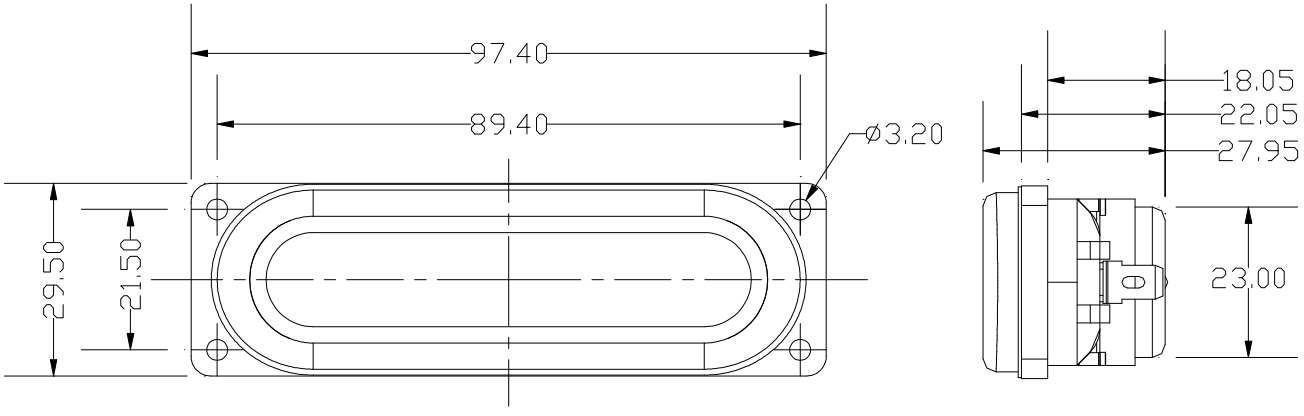

Figure 2. Nominal dimensions. Mounting gasket (thickness 1.8mm) not shown.