

SM-110/N LOW FREQUENCY TRANSDUCER SM Series

KEY FEATURES

- High power handling 200 W_{AES}
- 2" copper voice coil with polymide fiber glass former
- Sensitivity: 95 dB (1W / 1m)

- Extended controlled displacement: $X_{max} \pm 6 \text{ mm}$
- 28 mm peak-to-peak excursion before damage
- Designed for high power woofer applications





TECHNICAL SPECIFICATIONS

Nominal diameter	250 mr	m 10 in
Rated impedance		8 Ω
Minimum impedance		7,2 Ω
Power capacity ¹		200 W _{AES}
Program power ²		400 W
Sensitivity	95 dB 1V	V / 1m @ Z _N
Frequency range	4	5 - 6.000 Hz
Recom. enclosure vol.	20 / 50 I 0,7 / 1,8 ft ³	
Voice coil diameter	51,7 m	m 2 in
BI factor		13,2 N/A
Moving mass		0,038 kg
Voice coil length		15 mm
Air gap height		7 mm
X _{damage} (peak to peak)		28 mm

THIELE-SMALL PARAMETERS³

Resonant frequency, f _s	43 Hz
D.C. Voice coil resistance, R _e	6,2 Ω
Mechanical Quality Factor, Q _{ms}	7,9
Electrical Quality Factor, Q _{es}	0,37
Total Quality Factor, Q _{ts}	0,35
Equivalent Air Volume to C _{ms} , V _{as}	65 I
Mechanical Compliance, C _{ms}	368 μm / N
Mechanical Resistance, R _{ms}	1,3 kg / s
Efficiency, η ₀	1,4 %
Effective Surface Area, S _d	0,0355 m ²
Maximum Displacement, X _{max} ⁴	6 mm
Displacement Volume, V _d	213 cm ³
Voice Coil Inductance, L _e	1,7 mH

Notes

¹ The power capaticty is determined according to AES2-1984 (r2003) standard.

² Program power is defined as power capacity + 3 dB.

³ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

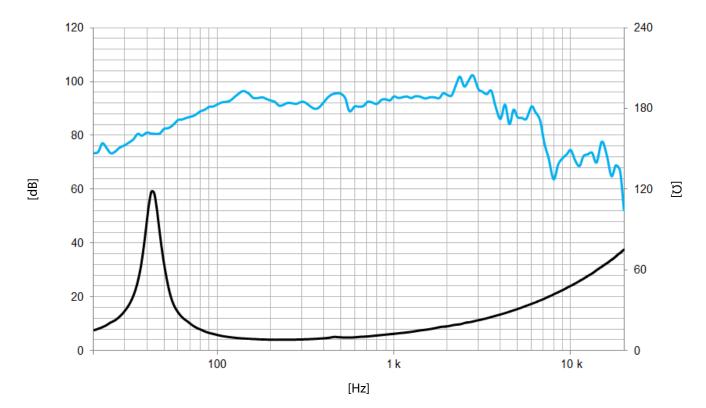
⁴ The X_{max} is calculated as $(L_{vc} - H_{ag})/2 + (H_{ag}/3,5)$, where L_{vc} is the voice coil length and H_{ag} is the air gap height.

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Note: Frequency response measured with loudspeaker standing on infinite baffle in anechoic chamber, 1W @ 1m $\,$

MOUNTING INFORMATION			
Overall diameter	260,5 mm	10,3 in	
Bolt circle diameter	243,5 mm	9,6 in	
Baffle cutout diameter:			
- Front mount	228 mm	9,0 in	
Depth	115 mm	4,5 in	
Net weight	3,5 kg	7,7 lb	
Shipping weight	3,9 kg	8,6 lb	

DIMENSION DRAWING

