

4FR40Nd

FULL RANGE FREQUENCY TRANSDUCER

Preliminary Data Sheet

KEY FEATURES

- 4" full-range compact neodymium loudspeaker
- 80 W program power
- Extended response and low distortion
- Paper cone and Santoprene[™] surround

- · Pressed steel basket
- Neodymium magnet
- Ideal form beam-steering application (columns), portable array and compact applications





TECHNICAL SPECIFICATIONS

Nominal diameter	100 mm	4 in
Rated impedance		8 Ω
Minimum impedance		7,2 Ω
Power capacity ¹		40 W _{AES}
Program power ²		80 W
Sensitivity	88 dB 1W / 1	Im @ Z _N
Frequency range	100 - 20.000 Hz	
Voice coil diameter	20,3mm	0,8 in
BI factor		4,7 N/A
Moving mass	0	,0045 kg
Voice coil length		7,7 mm
Air gap height		4 mm

THIELE-SMALL PARAMETERS 3

Resonant frequency, f _s	94 Hz
D.C. Voice coil resistance, R _e	6,4 Ω
Mechanical Quality Factor, Q _{ms}	10,8
Electrical Quality Factor, Q _{es}	0,78
Total Quality Factor, Qts	0,73
Equivalent Air Volume to C _{ms} , V _{as}	2,7 l
Mechanical Compliance, C _{ms}	$627~\mu m$ / N
Mechanical Resistance, R _{ms}	0,25 kg / s
Efficiency, η ₀	0,28 %
Effective Surface Area, S _d	0,0055 m ²
Maximum Displacement, X _{max} ⁴	3 mm
Displacement Volume, V _d	11 cm ³
Voice Coil Inductance, L _e @ 1 kHz	0,2 mH

Notes

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

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

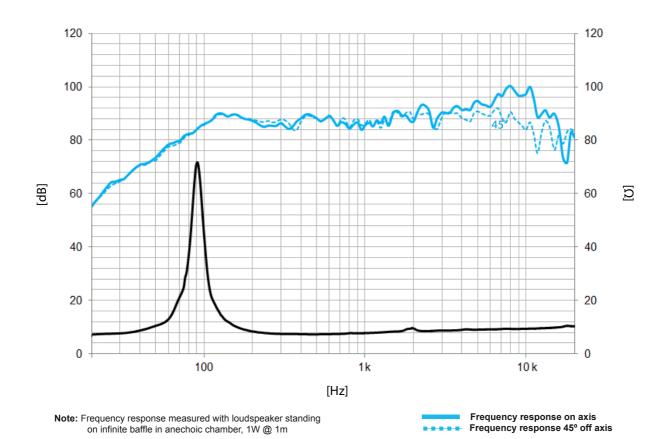
³ T-S parameters are measured after an exercise period using a preconditioning power test. The measurements are carried out with a velocity-current laser transducer and will reflect the long term parameters (once the loudspeaker has been working for a short period of time).

 $^{^4}$ 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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MOUNTING INFORMATION

Overall diameter	118,2 mm	4,6 in
Bolt circle diameter	108,2 mm	4,3 in
Baffle cutout diameter:		
- Front mount	92 mm	3,6 in
Depth	58 mm	2,3 in
Net weight	0,28 kg	0,6 lb
Shipping weight	0,45 kg	1,0 lb

DIMENSION DRAWING

