

## HDS Exclusive 4" Midwoofer



Type Number: 830881

### Features:

This High Definition Sound (HDS) line of products push the performance limits of midbass audio transducers in a range of sizes - from the standard 205mm (8-inch) model, down to the very small 106mm (4-inch) model. Feature-rich and utilizing copper for the lowest distortion possible, the high-end HDS Exclusive Series takes maximum advantage of over 80 years of R&D experience to help systems designers build the world's best audio products.

See architecture notes for [HDS Platform](#)

Driver Highlights: Nomex diaphragm, 26 mm coil, AL, CU, Phaseplug

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### Specs:

#### Electrical Data

Nominal impedance	Zn	8	ohm
Minimum impedance	Zmin	6.8	ohm
Maximum impedance	Zo	30.6	ohm
DC resistance	Re	5.9	ohm
Voice coil inductance	Le	1	mH

#### T-S Parameters

Resonance Frequency	fs	81.2	Hz
Mechanical Q factor	Qms	2.31	
Electrical Q factor	Qes	0.55	
Total Q factor	Qts	0.45	
Force factor	Bl	6.4	Tm
Mechanical resistance	Rms	1.63	Kg/s
Moving mass	Mms	7.4	g
Suspension compliance	Cms	0.52	mm/N
Effective cone diameter	D	8.2	cm
Effective piston area	Sd	53	cm <sup>2</sup>
Equivalent volume	Vas	2	ltrs
Sensitivity (2.83V/1m)		84	dB
Ratio BL/√(Re)		2.6	
Ratio fs/Qts	F	182	

#### Power handling

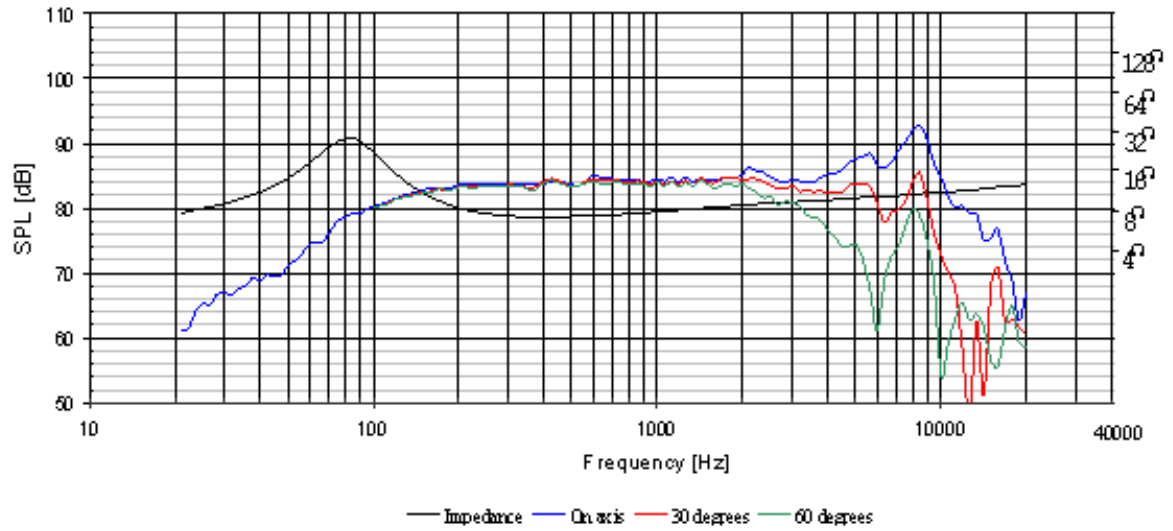
100h RMS noise test (IEC)	--	W
Long-term Max Power (IEC 18.3)	--	W
Max linear SPL (rms) @ power	--	dB/W
Short Term Max power (IEC 18.2)	--	W

#### Voice Coil and Magnet Parameters

Voice coil diameter	26	mm
Voice coil height	13	mm
Voice coil layers	2	
Height of the gap	6	mm
Linear excursion +/-	3.5	mm
Max mech. excursion +/-	--	mm
Flux density of gap	--	mWb
Total useful flux	0.7	mWb
Diameter of magnet	81	mm
Height of magnet	15	mm
Weight of magnet	0.31	Kg

Notes:  
IEC specs refer to IEC 60268-5 third edition.  
All Tympany products are RoHS compliant.

Frequency: 830881



Mechanical Dimensions:830881

