

HDS Exclusive 6½" Midwoofer



Type Number: 830883

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, 33 mm coil, AL, CU, LS, Phaseplug

See [Application Notes](#)

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Specs:

Electrical Data

Nominal impedance	Zn	8	ohm
Minimum impedance	Zmin	6.4	ohm
Maximum impedance	Zo	38.4	ohm
DC resistance	Re	5.7	ohm
Voice coil inductance	Le	1.1	mH

T-S Parameters

Resonance Frequency	fs	41.9	Hz
Mechanical Q factor	Qms	2.41	
Electrical Q factor	Qes	0.42	
Total Q factor	Qts	0.36	
Force factor	Bl	8.2	Tm
Mechanical resistance	Rms	1.83	Kg/s
Moving mass	Mms	16.8	g
Suspension compliance	Cms	0.86	mm/N
Effective cone diameter	D	13.1	cm
Effective piston area	Sd	135	cm ²
Equivalent volume	Vas	21.7	ltrs
Sensitivity (2.83V/1m)		87.8	dB
Ratio BL/√(Re)		3.4	
Ratio fs/Qts	F	122	

Power handling

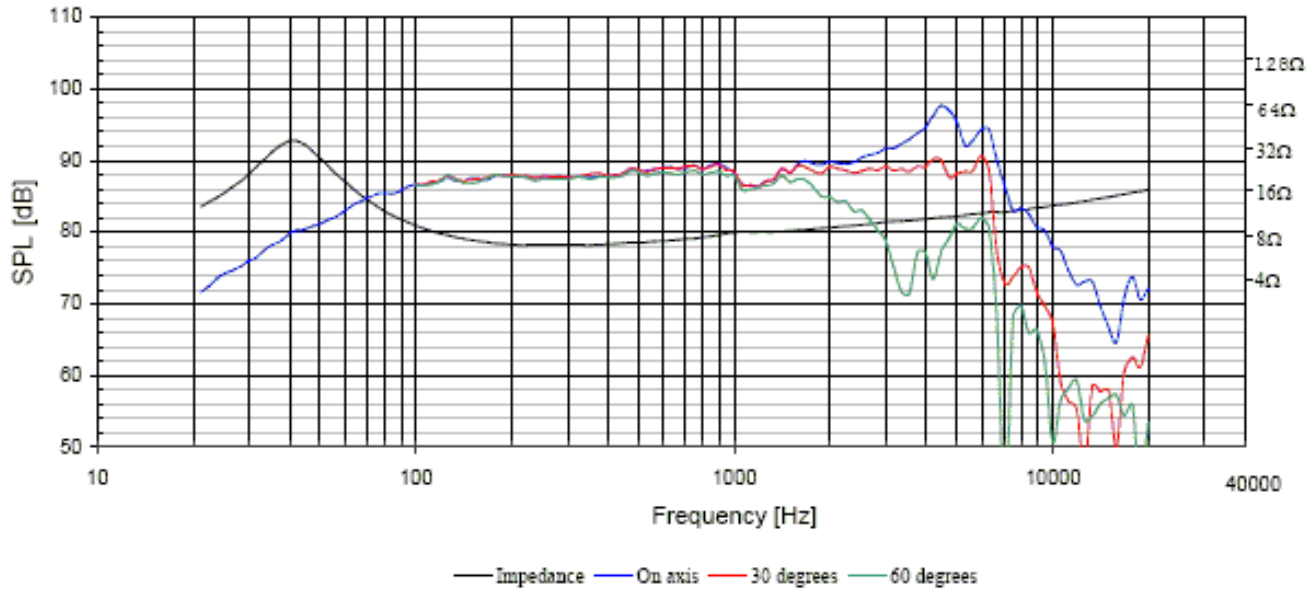
100h RMS noise test (IEC)	--	W
Long-term Max Power (IEC 18.3)	--	W
Max linear SPL (rms) @ power	--	dB/W
Short Term Max power (IEC 18.2)	--	W

Voice Coil and Magnet Parameters

Voice coil diameter	33	mm
Voice coil height	17.2	mm
Voice coil layers	2	
Height of the gap	6	mm
Linear excursion +/-	3	mm
Max mech. excursion +/-	--	mm
Flux density of gap	--	mWb
Total useful flux	1.1	mWb
Diameter of magnet	102	mm
Height of magnet	20	mm
Weight of magnet	0.64	Kg

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

Frequency: 830883



Mechanical Dimensions:830883

