



PHL Audio HP6251MNd

15 inches bass driver

Nominal Diameter	38 cm / 15 "
Rated Impedance	8 Ω
Reference efficiency (1W @ 1m)	96 dB SPL
Power Handling Capacity	1000 W AES
SPL max (continuous)	123 dB SPL
Usable frequency range	30 - 1000 Hz
Speaker net mass	5.7 kg

Architecture highlights :

- Ultra light injection molded Magnesium basket
- Neodymium magnet system with symmetric BL(x) and Le(x) characteristics
- natural convection Intercooling system for noiseless sound reproduction
- Heavy duty long excursion suspension with linear behavior for large signal
- Dual side coating diaphragm for excellent sound reproduction and tropical

Motor architecture

Voice coil diameter	mm	101
Voice coil length	mm	26
Air gap height	mm	10

Typical characteristics

Rated impedance	Z	Ω	8
Half space sensitivity (1W@1m)	-	dB SPL	96
Usable freq. range	-	Hz	30 - 1000
Power handling capacity (AES)	-	W	1000
Max Sound Pressure Level	SPL _{max}	dB SPL	123
Min. impedance modulus	Z _{min}	Ω @Hz	6.2@210
Voice-coil inductance @ 1kHz	Le _{1k}	mH	1.678
Voice-coil inductance @ 10kHz	Le _{10k}	mH	0.711
BL product	BL	N/A	26.0
Moving mass	Mms	kg	0.155

Thiele-Small parameters

Resonance frequency	Fs	Hz	38 (± 5)
DC Resistance	Re	Ω	5.3 (± 0.5)
Mechanical quality factor	Qms	1	5.69
Electrical quality factor	Qes	1	0.29
Total quality factor	Qts	1	0.28
Suspension compliance	Cms	10 ⁻⁶ .m/N	110
Effective piston area	Sd	m ²	0.0871
Equivalent Cas air load	Vas	m ³	0.1202
Max linear excursion	Xmax	mm	± 10.5
Linear displacement volume	Vd	10 ⁻³ .m ³	0.9145
Reference efficiency	η_0	%	2.2
Unity load volume	Vas.Qts ²	10 ⁻³ .m ³	9.2

Absolute maximum ratings

Short term max. input voltage	Vmax	V	180
Max.excursion before damage	Xdam	mm	19.0
Ambient operating temperature	Ta	°C	-10 to +50
Storage temperature		°C	-20 to +70
Environmental withstanding			Tropical



Mounting information

Air volume occupied by the driver	10 ⁻³ .m ³	4.20
Speaker net mass	kg	5.70
Baffle cut-out diameter (front mounting)	mm	355.0
Bolt number & Metric diameter	-	8x M6
Bolt circle diameter	mm	370 and 388
Max overall dimension (on ears)	mm	406.5
Max overall dimension (out of ears)	mm	380.5
Flange height	mm	13.0
Max magnet diameter	mm	140.0
Max depth (front mounting)	mm	173.0
Recommended reflex box	Lts / Hz	100L / 42Hz
Electrical connection		Ø4 mm Push buttons

