

OmnesAudio SW 12 HEX

Name	Value	Unit	Comment
Electrical Parameters			
Re	6.84	Ohm	electrical voice coil resistance at DC
Krm	0.0030	Ohm	WRIGHT inductance model
Erm	0.87		WRIGHT inductance model
Kxm	0.0211	Ohm	WRIGHT inductance model
Exm	0.73		WRIGHT inductance model
Cmes	419.15	µF	electrical capacitance representing moving mass
Lces	86.84	mH	electrical inductance representing driver compliance
Res	140.59	Ohm	resistance due to mechanical losses
fs	26.4	Hz	driver resonance frequency
Mechanical Parameters			
(using laser)			
Mms	205.030	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd (Sd)	191.523	g	mechanical mass of voice coil and diaphragm without air load
Rms	3.479	kg/s	mechanical resistance of total-driver losses
Cms	0.178	mm/N	mechanical compliance of driver suspension
Kms	5.63	N/mm	mechanical stiffness of driver suspension
Bl	22.117	N/A	force factor (Bl product)
Lambda s	-0.048		suspension creep factor
Loss factors			
Qtp	0.469		total Q-factor considering all losses
Qms	9.768		mechanical Q-factor of driver in free air considering Rms only
Qes	0.475		electrical Q-factor of driver in free air considering Re only
Qts	0.453		total Q-factor considering Re and Rms only
Other Parameters			
Vas	68.6669	l	equivalent air volume of suspension
n0	0.255	%	reference efficiency (2 pi-radiation using Re)
Lm	86.27	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Lnom	86.94	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	6.76	%	root-mean-square fitting error of driver impedance Z(f)
rmse Hx	3.36	%	root-mean-square fitting error of transfer function Hx (f)
Series resistor	0.00	Ohm	resistance of series resistor
Sd	522.79	cm ²	diaphragm area