

Thiele/Small Parameters

44L7S152

Name		Unit	Comment
Re	3.6	Ohm	electrical voice coil resistance at DC
Le	4.95225	mH	frequency independent part of voice coil inductance
Krm	0.0231	Ohm	WRIGHT inductance model
Erm	0.7875		WRIGHT inductance model
Kxm	0.0957	Ohm	WRIGHT inductance model
Exm	0.6775		WRIGHT inductance model
Cmes	955.5525	μ F	electrical capacitance representing moving mass
Lces	41.92	mH	electrical inductance representing driver compliance
Res	100.9025	Ohm	resistance due to mechanical losses
fs	25.2	Hz	driver resonance frequency
Mms	441.833	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd	403.7535	g	mechanical mass of voice coil and diaphragm without air load
Rms	4.60575	kg/s	mechanical resistance of total-driver losses
Cms	0.0905	mm/N	mechanical compliance of driver suspension
Kms	11.0925	N/mm	mechanical stiffness of driver suspension
Bl	21.5085	N/A	force factor (Bl product)
Lambda	0.058		suspension creep factor
Qtp	0.70225		total Q-factor considering all losses
Qms	15.2385		mechanical Q-factor of driver in free air considering Rms only
Qes	0.5445		electrical Q-factor of driver in free air considering Re only
Qts	0.526		total Q-factor considering Re and Rms only
Vas	139.67785	l	equivalent air volume of suspension
n0	0.39325	%	reference efficiency (2 pi-radiation using Re)
Lm	88.145	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Ln0m	88.6	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	3.1725	%	root-mean-square fitting error of driver impedance Z(f)
rmse Hx	1.595	%	root-mean-square fitting error of transfer function Hx (f)
Sd	1043.3	cm ²	diaphragm area
Xmax	19	mm	