

Thiele/Small Parameters

44L7S104

Name		Unit	Comment
Re	8.166	Ohm	electrical voice coil resistance at DC
Le	6.4506	mH	frequency independent part of voice coil inductance
Krm	0.02612	Ohm	WRIGHT inductance model
Erm	0.814		WRIGHT inductance model
Kxm	0.12478	Ohm	WRIGHT inductance model
Exm	0.68		WRIGHT inductance model
Cmes	329.26	μ F	electrical capacitance representing moving mass
Lces	70.838	mH	electrical inductance representing driver compliance
Res	81.85	Ohm	resistance due to mechanical losses
fs	33.02	Hz	driver resonance frequency
Mms	185.6848	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd	175.5158	g	mechanical mass of voice coil and diaphragm without air load
Rms	3.11	kg/s	mechanical resistance of total-driver losses
Cms	0.1252	mm/N	mechanical compliance of driver suspension
Kms	8.002	N/mm	mechanical stiffness of driver suspension
BI	23.7614	N/A	force factor (BI product)
Lambda	0.0407		suspension creep factor
Qtp	0.6558		total Q-factor considering all losses
Qms	12.3974		mechanical Q-factor of driver in free air considering Rms only
Qes	0.558		electrical Q-factor of driver in free air considering Re only
Qts	0.5342		total Q-factor considering Re and Rms only
Vas	33.17974	l	equivalent air volume of suspension
n0	0.2062	%	reference efficiency (2 pi-radiation using Re)
Lm	85.336	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Lnom	85.248	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	2.652	%	root-mean-square fitting error of driver impedance Z(f)
rmse Hx	1.877	%	root-mean-square fitting error of transfer function Hx (f)
Sd	432.636	cm ²	diaphragm area
Xmax	16.25	mm	