

Thiele/Small Parameters

44L7S82

Name		Unit	Comment
Re	3.40	Ohm	electrical voice coil resistance at DC
Le	3.4736	mH	frequency independent part of voice coil inductance
Krm	0.01	Ohm	WRIGHT inductance model
Erm	0.85		WRIGHT inductance model
Kxm	0.04	Ohm	WRIGHT inductance model
Exm	0.74		WRIGHT inductance model
Cmes	766.80	μ F	electrical capacitance representing moving mass
Lces	17.96	mH	electrical inductance representing driver compliance
Res	43.70	Ohm	resistance due to mechanical losses
fs	42.94	Hz	driver resonance frequency
Mms	136.11	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd	131.13	g	mechanical mass of voice coil and diaphragm without air load
Rms	4.07	kg/s	mechanical resistance of total-driver losses
Cms	0.10	mm/N	mechanical compliance of driver suspension
Kms	9.92	N/mm	mechanical stiffness of driver suspension
BI	13.33	N/A	force factor (BI product)
Lambda	0.03		suspension creep factor
Qtp	0.80		total Q-factor considering all losses
Qms	9.04		mechanical Q-factor of driver in free air considering Rms only
Qes	0.70		electrical Q-factor of driver in free air considering Re only
Qts	0.65		total Q-factor considering Re and Rms only
Vas	10.36	l	equivalent air volume of suspension
n0	0.11	%	reference efficiency (2 pi-radiation using Re)
Lm	82.69	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Ln0m	83.40	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	3.61	%	root-mean-square fitting error of driver impedance Z(f)
rmse Hx	1.79	%	root-mean-square fitting error of transfer function Hx (f)
Sd	268.96	cm ²	diaphragm area
Xmax	13.5	mm	