

# Thiele/Small Parameters

## 45L7R122

Re	3.65	Ohm	electrical voice coil resistance at DC
Krm	0.00825	Ohm	WRIGHT inductance model
Erm	0.895		WRIGHT inductance model
Kxm	0.05755	Ohm	WRIGHT inductance model
Exm	0.73		WRIGHT inductance model
Cmes	878.4	µF	electrical capacitance representing moving mass
Lces	35.32	mH	electrical inductance representing driver compliance
Res	48.355	Ohm	resistance due to mechanical losses
fs	28.6	Hz	driver resonance frequency
Mms	272.0275	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd	253.51	g	mechanical mass of voice coil and diaphragm without air load
Rms	6.4065	kg/s	mechanical resistance of total-driver losses
Cms	0.114	mm/N	mechanical compliance of driver suspension
Kms	8.815	N/mm	mechanical stiffness of driver suspension
Bl	17.598	Tm	force factor (Bl product)
Lambda	0.0535		suspension creep factor
Qtp	0.651		total Q-factor considering all losses
Qms	7.6345		mechanical Q-factor of driver in free air considering Rms only
Qes	0.577		electrical Q-factor of driver in free air considering Re only
Qts	0.5365		total Q-factor considering Re and Rms only
Vas	67.19975	l	equivalent air volume of suspension
n0	0.262		reference efficiency (2 pi-radiation using Re)
Lm	86.38	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Lnom	86.775	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	2.29		root-mean-square fitting error of driver impedance Z(f)
rmse Hx	1.45		root-mean-square fitting error of transfer function Hx (f)
Sd	645.17	cm <sup>2</sup>	diaphragm area
Xmax	13.9	mm	