

# Thiele/Small Parameters

## 41L7102

Re	3.73	Ohm	electrical voice coil resistance at DC
Krm	0.01405	Ohm	WRIGHT inductance model
Erm	0.795		WRIGHT inductance model
Kxm	0.07155	Ohm	WRIGHT inductance model
Exm	0.67		WRIGHT inductance model
Cmes	616.26	µF	electrical capacitance representing moving mass
Lces	27.025	mH	electrical inductance representing driver compliance
Res	69.95	Ohm	resistance due to mechanical losses
fs	39	Hz	driver resonance frequency
Mms	242.285	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd	231.82	g	mechanical mass of voice coil and diaphragm without air load
Rms	5.622	kg/s	mechanical resistance of total-driver losses
Cms	0.069	mm/N	mechanical compliance of driver suspension
Kms	14.55	N/mm	mechanical stiffness of driver suspension
Bl	19.8295	Tm	force factor (Bl product)
Lambda	0.013		suspension creep factor
Qtp	0.6865		total Q-factor considering all losses
Qms	10.5605		mechanical Q-factor of driver in free air considering Rms only
Qes	0.563		electrical Q-factor of driver in free air considering Re only
Qts	0.5345		total Q-factor considering Re and Rms only
Vas	18.92285	l	equivalent air volume of suspension
n0	0.1915		reference efficiency (2 pi-radiation using Re)
Lm	85.025	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Lnom	85.33	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	3.615		root-mean-square fitting error of driver impedance Z(f)
rmse Hx	3.155		root-mean-square fitting error of transfer function Hx (f)
Sd	441	cm <sup>2</sup>	diaphragm area
Xmax	18.25	mm	