

Thiele/Small Parameters

42CWQ124

Re	6.1	Ohm	electrical voice coil resistance at DC
Krm	0.00945	Ohm	WRIGHT inductance model
Erm	0.935		WRIGHT inductance model
Kxm	0.0954	Ohm	WRIGHT inductance model
Exm	0.73		WRIGHT inductance model
Cmes	440.86	µF	electrical capacitance representing moving mass
Lces	40.18	mH	electrical inductance representing driver compliance
Res	83.905	Ohm	resistance due to mechanical losses
fs	37.8	Hz	driver resonance frequency
Mms	257.4875	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd	244.599	g	mechanical mass of voice coil and diaphragm without air load
Rms	6.964	kg/s	mechanical resistance of total-driver losses
Cms	0.0685	mm/N	mechanical compliance of driver suspension
Kms	14.54	N/mm	mechanical stiffness of driver suspension
Bl	24.1725	Tm	force factor (Bl product)
Lambda	-0.031		suspension creep factor
Qtp	0.7355		total Q-factor considering all losses
Qms	8.7885		mechanical Q-factor of driver in free air considering Rms only
Qes	0.6385		electrical Q-factor of driver in free air considering Re only
Qts	0.5955		total Q-factor considering Re and Rms only
Vas	24.9853	l	equivalent air volume of suspension
n0	0.2035		reference efficiency (2 pi-radiation using Re)
Lm	85.29	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Lnom	86.465	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	2.81		root-mean-square fitting error of driver impedance Z(f)
rmse Hx	2.725		root-mean-square fitting error of transfer function Hx (f)
Sd	506.71	cm ²	diaphragm area
Xmax	20.1	mm	