

Thiele/Small Parameters

42CWQ102

Re	3.615	Ohm	electrical voice coil resistance at DC
Krm	0.00705	Ohm	WRIGHT inductance model
Erm	0.895		WRIGHT inductance model
Kxm	0.0462	Ohm	WRIGHT inductance model
Exm	0.755		WRIGHT inductance model
Cmes	527.855	µF	electrical capacitance representing moving mass
Lces	31.015	mH	electrical inductance representing driver compliance
Res	70.49	Ohm	resistance due to mechanical losses
fs	39.35	Hz	driver resonance frequency
Mms	195.373	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd	188.089	g	mechanical mass of voice coil and diaphragm without air load
Rms	5.256	kg/s	mechanical resistance of total-driver losses
Cms	0.084	mm/N	mechanical compliance of driver suspension
Kms	11.945	N/mm	mechanical stiffness of driver suspension
Bl	19.2415	Tm	force factor (Bl product)
Lambda	-0.0235		suspension creep factor
Qtp	0.5625		total Q-factor considering all losses
Qms	9.203		mechanical Q-factor of driver in free air considering Rms only
Qes	0.472		electrical Q-factor of driver in free air considering Re only
Qts	0.4485		total Q-factor considering Re and Rms only
Vas	14.2185	l	equivalent air volume of suspension
n0	0.1765		reference efficiency (2 pi-radiation using Re)
Lm	84.67	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Lnom	85.115	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	3.355		root-mean-square fitting error of driver impedance Z(f)
rmse Hx	2.295		root-mean-square fitting error of transfer function Hx (f)
Sd	346.36	cm ²	diaphragm area
Xmax	16.25	mm	