

Thiele/Small Parameters

42CWQ152

Re	3.625	Ohm	electrical voice coil resistance at DC
Krm	0.01455	Ohm	WRIGHT inductance model
Erm	0.845		WRIGHT inductance model
Kxm	0.06805	Ohm	WRIGHT inductance model
Exm	0.735		WRIGHT inductance model
Cmes	761.75	µF	electrical capacitance representing moving mass
Lces	37.85	mH	electrical inductance representing driver compliance
Res	66.365	Ohm	resistance due to mechanical losses
fs	29.7	Hz	driver resonance frequency
Mms	392.825	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd	366.566	g	mechanical mass of voice coil and diaphragm without air load
Rms	7.7775	kg/s	mechanical resistance of total-driver losses
Cms	0.0735	mm/N	mechanical compliance of driver suspension
Kms	13.675	N/mm	mechanical stiffness of driver suspension
Bl	22.709	Tm	force factor (Bl product)
Lambda	0.023		suspension creep factor
Qtp	0.6385		total Q-factor considering all losses
Qms	9.4175		mechanical Q-factor of driver in free air considering Rms only
Qes	0.5155		electrical Q-factor of driver in free air considering Re only
Qts	0.4885		total Q-factor considering Re and Rms only
Vas	68.88015	l	equivalent air volume of suspension
n0	0.3365		reference efficiency (2 pi-radiation using Re)
Lm	87.46	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Lnom	87.885	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	2.91		root-mean-square fitting error of driver impedance Z(f)
rmse Hx	2.035		root-mean-square fitting error of transfer function Hx (f)
Sd	814.33	cm ²	diaphragm area
Xmax	20.5	mm	