

Thiele/Small Parameters

42CWQ122

Re	3.765	Ohm	electrical voice coil resistance at DC
Krm	0.01045	Ohm	WRIGHT inductance model
Erm	0.88		WRIGHT inductance model
Kxm	0.06865	Ohm	WRIGHT inductance model
Exm	0.73		WRIGHT inductance model
Cmes	732.895	µF	electrical capacitance representing moving mass
Lces	26.34	mH	electrical inductance representing driver compliance
Res	56.655	Ohm	resistance due to mechanical losses
fs	36.2	Hz	driver resonance frequency
Mms	264.538	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd	251.649	g	mechanical mass of voice coil and diaphragm without air load
Rms	6.37	kg/s	mechanical resistance of total-driver losses
Cms	0.073	mm/N	mechanical compliance of driver suspension
Kms	13.71	N/mm	mechanical stiffness of driver suspension
Bl	18.997	Tm	force factor (Bl product)
Lambda	0.004		suspension creep factor
Qtp	0.7685		total Q-factor considering all losses
Qms	9.4545		mechanical Q-factor of driver in free air considering Rms only
Qes	0.628		electrical Q-factor of driver in free air considering Re only
Qts	0.5885		total Q-factor considering Re and Rms only
Vas	26.52385	l	equivalent air volume of suspension
n0	0.1935		reference efficiency (2 pi-radiation using Re)
Lm	85.06	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	1.995		root-mean-square fitting error of driver impedance Z(f)
rmse Hx	2.1		root-mean-square fitting error of transfer function Hx (f)
Sd	506.71	cm ²	diaphragm area
Xmax	20.1	mm	