

# Thiele/Small Parameters

## 45KMF122

Re	1.77	Ohm	electrical voice coil resistance at DC
Krm	0.00245	Ohm	WRIGHT inductance model
Erm	0.905		WRIGHT inductance model
Kxm	0.0185	Ohm	WRIGHT inductance model
Exm	0.75		WRIGHT inductance model
Cmes	1400.98	µF	electrical capacitance representing moving mass
Lces	9.155	mH	electrical inductance representing driver compliance
Res	26.145	Ohm	resistance due to mechanical losses
fs	44.55	Hz	driver resonance frequency
Mms	156.9085	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd	144.6195	g	mechanical mass of voice coil and diaphragm without air load
Rms	4.2875	kg/s	mechanical resistance of total-driver losses
Cms	0.0815	mm/N	mechanical compliance of driver suspension
Kms	12.27	N/mm	mechanical stiffness of driver suspension
Bl	10.588	Tm	force factor (Bl product)
Lambda	0.008		suspension creep factor
Qtp	0.784		total Q-factor considering all losses
Qms	10.242		mechanical Q-factor of driver in free air considering Rms only
Qes	0.694		electrical Q-factor of driver in free air considering Re only
Qts	0.65		total Q-factor considering Re and Rms only
Vas	27.8122	l	equivalent air volume of suspension
n0	0.3405		reference efficiency (2 pi-radiation using Re)
Lm	87.51	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Lnom	88.04	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	4.56		root-mean-square fitting error of driver impedance Z(f)
rmse Hx	2.12		root-mean-square fitting error of transfer function Hx (f)
Sd	490.87	cm <sup>2</sup>	diaphragm area
Xmax	10.3	mm	