

# Thiele/Small Parameters

## 44CVX152

|         |         |                 |  |
|---------|---------|-----------------|--|
| Re      | 4.23    | Ohm             | electrical voice coil resistance at DC   |
| Krm     | 0.0151  | Ohm             | WRIGHT inductance model  |
| Erm     | 0.86    |                 | WRIGHT inductance model  |
| Kxm     | 0.0657  | Ohm             | WRIGHT inductance model  |
| Exm     | 0.75    |                 | WRIGHT inductance model  |
| Cmes    | 476.03  | µF              | electrical capacitance representing moving mass                                |
| Lces    | 78.73   | mH              | electrical inductance representing driver compliance                           |
| Res     | 173.17  | Ohm             | resistance due to mechanical losses  |
| fs      | 26      | Hz              | driver resonance frequency   |
| Mms     | 334.978 | g               | mechanical mass of driver diaphragm assembly including air load and voice coil |
| Mmd     | 307.223 | g               | mechanical mass of voice coil and diaphragm without air load                   |
| Rms     | 4.064   | kg/s            | mechanical resistance of total-driver losses                                   |
| Cms     | 0.112   | mm/N            | mechanical compliance of driver suspension                                     |
| Kms     | 8.94    | N/mm            | mechanical stiffness of driver suspension                                      |
| Bl      | 26.527  | Tm              | force factor (Bl product)  |
| Lambda  | 0.006   |                 | suspension creep factor  |
| Qtp     | 0.408   |                 | total Q-factor considering all losses  |
| Qms     | 13.465  |                 | mechanical Q-factor of driver in free air considering Rms only                 |
| Qes     | 0.329   |                 | electrical Q-factor of driver in free air considering Re only                  |
| Qts     | 0.321   |                 | total Q-factor considering Re and Rms only                                     |
| Vas     | 113.052 | l               | equivalent air volume of suspension  |
| n0      | 0.581   |                 | reference efficiency (2 pi-radiation using Re)                                 |
| Lm      | 89.84   | dB              | characteristic sound pressure level (SPL at 1m for 1W @ Re)                    |
| Lnom    | 89.6    | dB              | nominal sensitivity (SPL at 1m for 1W @ Zn)                                    |
| rmse Z  | 4.1     |                 | root-mean-square fitting error of driver impedance Z(f)                        |
| rmse Hx | 1.91    |                 | root-mean-square fitting error of transfer function Hx (f)                     |
| Sd      | 844.96  | cm <sup>2</sup> | diaphragm area   |
| Xmax    | 19.0    | mm              |  |