

## SCIENTIFIC DESIGN SOFTWARE Driver Parameters From Measurement Data

## Entered Data as Follows: Entered driver DC resistance (Re) 7.20 ohms Entered driver resonance frequency (Fs) 65.00 hertz Entered driver maximum impedance at Fs 34.80 ohms Entered driver F1 frequency 48.00 hertz at 15.80 ohms Entered driver F2 frequency 86.00 hertz at 15.80 ohms Calculated Square root of F1\*F2 64.20 hertz Calculated error factor 1.20 percent Compliance calculated by ADDED MASS method Entered added mass 10.00 grams Entered driver new resonance frequency 40.00 hertz Entered driver piston diameter 107.00 mm Entered driver magnet gap depth 4.00 mm Entered driver voice coil length 8.00 mm Calculated Thiele/Small Parameters: Free Air Resonance (Fs)=SQR(F1\*F2) 64.20 hertz Qts 0.7685 Qes 0.9689 Qms 3.71 Equivalent acoustic compliance (Vas) 11.00 liters Piston area (Sd) 0.0090 square meters DC resistance (Re) 7.20 ohms Volume displacement (Vd) 17.98 ccm Linear displacement (Xmax) 2.00 mm Coil Inductance (Le) 0.46 mH Reference Efficiency (Ref Eff) 0.29 percent Efficiency Bandwidth Product (EBP) 66.26 hertz Other Calculated Data: Moving Mass of Diaphragm only (Mmd) 5.86 grams Moving Mass of Diaphragm & Air Load (Mms) 6.35 grams Mass of Air load on diaphragm (Ma) 0.48 grams Compliance (Cms) 0.00097 m/N BL product (BL) 4.36 N/A Sensitivity (SPL 1w/1m)

86.60 dB

