



234  $\pm 0.5$

110  $\pm 2.2$

8  $\pm 0.5$

256  $\pm 0.3$

78  $\pm 0.6$

29  $\pm 0.4$

107  $\pm 1.0$

REVISION		MATERIAL	SCALE	QUANTITY
10-2-8		FIBERGLASS	1/2	1
		TOLERANCE: AS PER		
1		TITLE	10" SPEAKER	
1	10-2-8	DATE REC'D.	MCM #55-1300	
1	REVISION	23-3-25	PRINT NO.	
1	10-2-8	23-3-25	PRINT NO.	

SCIENTIFIC DESIGN SOFTWARE  
Driver Parameters From Measurement Data

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Entered Data as Follows:

Entered driver DC resistance (Re)	6.90 ohms
Entered driver resonance frequency (Fs)	44.00 hertz
Entered driver maximum impedance at Fs	37.40 ohms
Entered driver F1 frequency	35.00 hertz at 16.10 ohms
Entered driver F2 frequency	57.00 hertz at 16.10 ohms
Calculated Square root of F1*F2	44.70 hertz
Calculated error factor	1.60 percent
Compliance calculated by ADDED MASS method	
Entered added mass	20.00 grams
Entered driver new resonance frequency	35.00 hertz
Entered driver piston diameter	213.00 mm
Entered driver magnet gap depth	6.00 mm
Entered driver voice coil length	12.70 mm

Calculated Thiele/Small Parameters:

Free Air Resonance (Fs)=SQR(F1*F2)	44.70 hertz
Qts	0.8727
Qes	1.0702
Qms	4.73
Equivalent acoustic compliance (Vas)	71.34 liters
Piston area (Sd)	0.0356 square meters
DC resistance (Re)	6.90 ohms
Volume displacement (Vd)	119.37 ccm
Linear displacement (Xmax)	3.35 mm
Power handling (Pe)	TO BE ENTERED
Coil Inductance (Le)	TO BE ENTERED
Reference Efficiency (Ref Eff)	0.57 percent
Efficiency Bandwidth Product (EBP)	41.77 hertz

Other Calculated Data:

Moving Mass of Diaphragm only (Mmd)	27.87 grams
Moving Mass of Diaphragm & Air Load (Mms)	31.69 grams
Mass of Air load on diaphragm (Ma)	3.82 grams
Compliance (Cms)	0.00040 m/N
BL product (BL)	7.58 N/A
Sensitivity (SPL 1w/1m)	89.57 dB

