

SPECIFICATIONS

ITEMS	SPECIFICATIONS
1 DIMENSIONS	205 MM (8 INCH)
2 IMPEDANCE	4 ± 0.6 OHM(0.3 KHz 1.0 V)
3 INPUT	RATED - W , MAX 80 W
4 LOWEST RESONANT FREQUENCY	35 ± 7 Hz (1.0 V)
5 SOUND PRESSURE LEVEL	91 ± 2 dB/W (2 V , 1.0 M) AVERANE AT 0.2 , 0.25 , 0.3 , 0.4 KHz
6 EFFECTIVE FREQUENCY RANGE	F0 ~ 5000 Hz
7 DISTORTION FACTOR	5.0 % MAX (AT 0.3 KHz , 10 W , 1.0 M)
8 FLUX DENSITY	— ± — GAUSS
9 TOTAL FLUX	— ± — MAXWELL
10 POLARITY	WHEN A POSITIVE DC CURRENT IS APPLIED TO THE TERMINAL MARKED + , THE DIAPHRAGM SHALL MOVE FORWARD .
11 SINE WAVE TEST	10 V
12 MAGNET	100 × 60 × 20 MM(503 GRAMS) (17.7 OZ)
13 WEIGHT	1480 GRAMS (52.20 OZ)
14 DROP TEST	THE SPEAKER SHALL BE DROPPED ALONG A FLAT PLATE 15° INCLINED FROM THE VERTICAL. THEN LET THE MAGNETIC FIELD PART IMPACT THE MAHOGANY BLOCK AT THE BOTTOM OF THE SLIDE. NO ANY STRUCTURAL OR ACOUSTIC DEFECT SHALL OCCUR AS A RESULT OF THIS TEST. THE DROP DISTANCE IS 1 METER.
15 LIFE TEST	80 W 96 H EIA WHITE NOISE
16 HUMIDITY TEST	43 °C 92 2 % RH 96 H
17 TEMPERATURE TEST	70 °C 96 H

DESIGE	CHARGE	HEAD	MANAGER

SCIENTIFIC DESIGN SOFTWARE
Driver Parameters From Measurement Data

Entered Data as Follows:

Entered driver DC resistance (Re)	3.40 ohms
Entered driver resonance frequency (Fs)	35.00 hertz
Entered driver maximum impedance at Fs	34.30 ohms
Entered driver F1 frequency	21.00 hertz at 10.80 ohms
Entered driver F2 frequency	56.00 hertz at 10.80 ohms
Calculated Square root of F1*F2	34.30 hertz
Calculated error factor	2.00 percent
Compliance calculated by ADDED MASS method	
Entered added mass	20.00 grams
Entered driver new resonance frequency	24.00 hertz
Entered driver piston diameter	164.00 mm
Entered driver magnet gap depth	6.00 mm
Entered driver voice coil length	6.80 mm

Calculated Thiele/Small Parameters:

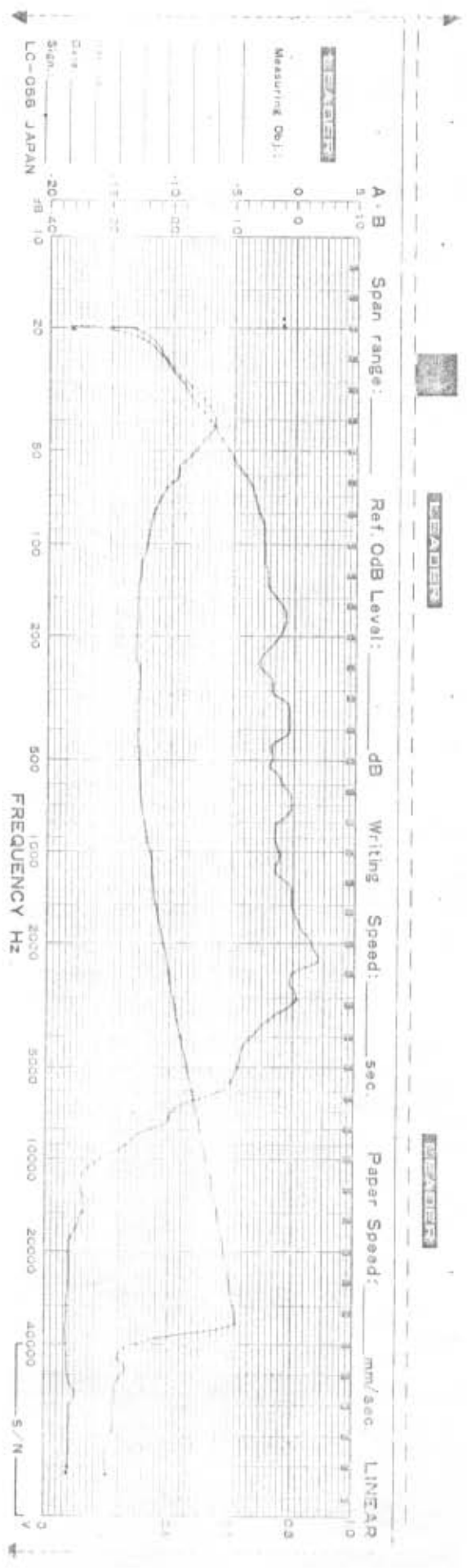
Free Air Resonance (Fs)=SQR(F1*F2)	34.30 hertz
Qts	0.3085
Qes	0.3425
Qms	3.11
Equivalent acoustic compliance (Vas)	70.34 liters
Piston area (Sd)	0.0211 square meters
DC resistance (Re)	3.40 ohms
Volume displacement (Vd)	21.12 ccm
Linear displacement (Xmax)	1.00 mm
Coil Inductance (Le)	0.62 mH
Reference Efficiency (Ref Eff)	0.80 percent
Efficiency Bandwidth Product (EBP)	100.15 hertz

Other Calculated Data:

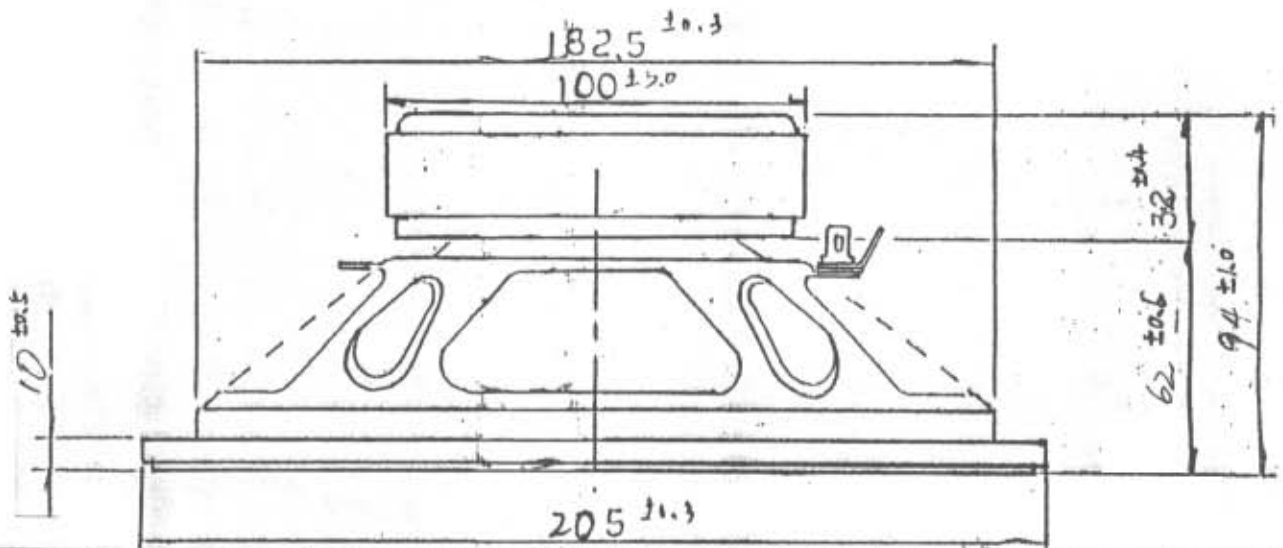
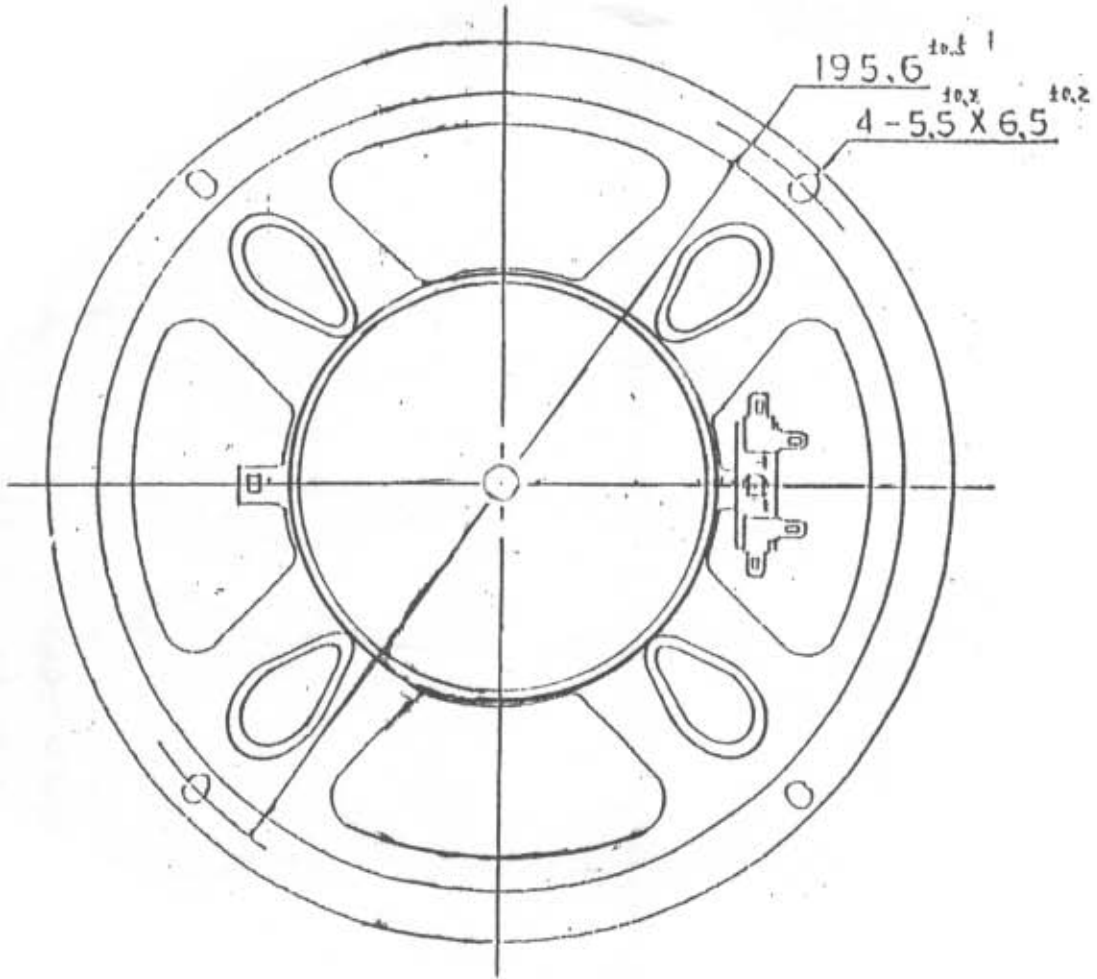
Moving Mass of Diaphragm only (Mmd)	17.44 grams
Moving Mass of Diaphragm & Air Load (Mms)	19.18 grams
Mass of Air load on diaphragm (Ma)	1.74 grams
Compliance (Cms)	0.00113 m/N
BL product (BL)	6.41 N/A
Sensitivity (SPL 1w/1m)	91.01 dB

END OF REPORT

MCM Audio Select
8" Woofer
Model 55-1520



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		MATERIAL	SCALE 1/8"	QUANTITY
		FINISH	TOLERANCE	ANGLE
		TITLE Model 55-1520		