

JBL Professional Design Engineering	Engineering Design Specification	Date Effective 11/5/97	Number 1739
	Model: 252F From EPR #1 Unit # 5		Page 1 of 4

Frequency Response: See Attached curves, page 3

Impedance: See attached curve, page 3

Harmonic Distortion: See attached curve, page 4

Theile- Small Parameters: See Page 2

Voice Coil: 224 Turns of 26 Ga. Round Copper, 3 layer,
0.7" x 2 long (DCD Geom), 1.4 ohm DCR

Magnet Flux: 99,000 lines in ea. 0.3" thk top plate (X2 for both gaps)
260,000 total lines intercepted by voice coil

Motional Impedance: 29 Ohms @ 24 Hz

Minimum Impedance: 1.6 Ohms @ 200 Hz

Polarity: Positive voltage to WIDE terminal
gives forward diaphragm motion.

Power Test: 40-400 Hz pink noise 6 dB Crest factor In free air
15.3 VTRMS (150 watts @ 1.6 ohms) for 300 hrs

Weight: 7.2 lbs

REVISIONS

LTR	DESCRIPTION	DATE	APPR
A	INITIAL RELEASE AT 150 W. Goal is 220 watts	11/5/97	REH

Design Engineer

Ralph Hyde

Theile - Small Parameters

	Before power test	After power test	
Re:	1.38	See B.P.T.	Ohms
Fs:	24		Hertz
Qts:	0.29		
Qms:	6.7		
Qes:	0.3		
Vas:	171		Liters
Ref Eff:	0.75%	See B.P.T.	
Sd:	0.053	See B.P.T.	Sq Meters
Mms:	103	See B.P.T.	Gms
BL:	8.4	See B.P.T.	T*M
Le @ 1KHz:	0.35	See B.P.T.	mH
Xmax:	7	See B.P.T.	mm
	10% THD		

1.41 V @ 1m (1 watt @ 2 Ohms)

10 Cu. Ft. Sealed
enclosure

in 1/2 Space

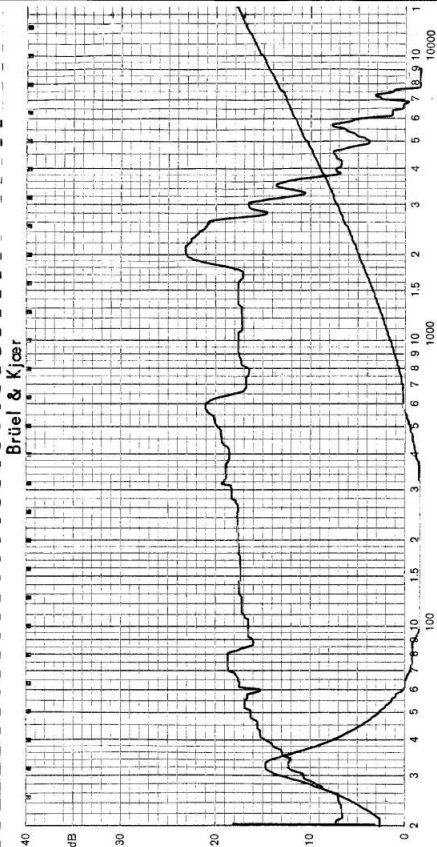
Zero level 70 dB

Impedance

Zero level 3.16 Ohms

Proposed response window

Freq (Hz)	Limits +/- dB	Resolution Octaves
50-400	1	1/3
400-1KHz	2	0



5.9 V @ 1 m (22 Watts @ 1.6 ohms)
10 Cu. Ft. Sealed Enclosure
in 1/2 space
Zero Level 70 dB

Distortion raised 20dB
Red = 2nd Harmonic
Blue = 3rd Harmonic

