

JBL Engineering	Engineering Standard	Date Effective 7/11/97	Number 1721
	Engineering Design Specification		Page 1 of 4

Model: 252G (From EPR #1 Unit #5)

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: 202 Turns of 25.5 Ga. Round Copper, 3 layer,
0.7" x 2 long (DCD Geom), 4.4 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: 105 Ohms @ 23 Hz

Minimum Impedance: 5.0 Ohms @ 200 Hz

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

Power Test: 50-500 Hz pink noise 6 dB Crest factor In free air
27.4 VTRMS (150 watts @ 5.0 ohms) for 300 hrs

Weight: 7.2 lbs

REVISIONS

LTR	DESCRIPTION	DATE	APPR
A B	INITIAL RELEASE AT 150 W. Goal is 33 v - 220 watts		REH

Design Engineer

Ralph Hyde

Model 252G

Theile - Small Parameters

	Before power test	After power test	
Re:	4.4	See B.P.T.	Ohms
Fs:	23		Hertz
Qts:	0.25		
Qms:	6.3		
Qes:	0.26		
Vas:	178		Liters
Ref Eff:	0.79%	See B.P.T.	
Sd:	0.053	See B.P.T.	Sq Meters
Mms:	110	See B.P.T.	Gms
BL:	16.3	See B.P.T.	T*M
Le @ 1KHz:	1.24	See B.P.T.	mH
Xmax:	7	See B.P.T.	mm
	10% THD		

Model 252G

2.43 V @ 1m (1 watt @ 6 Ohms)
enclosure
10 Cu. Ft. Scaled

in 1/2 Space

Zero level

70 dB

Impedance

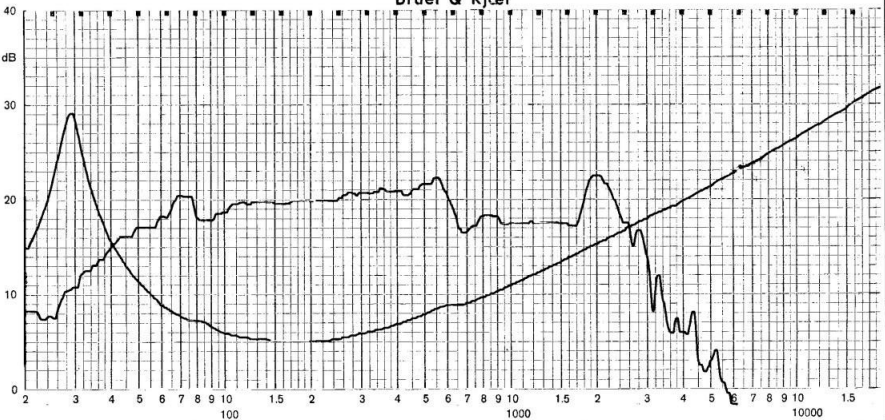
Zero level

3.16 Ohms

Proposed response window

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

Brüel & Kjær



Model: 252G

10.5 V @ 1 m (22 Watts @ 5.0 ohms)
10 Cu. Ft. Sealed Enclosure
in 1/2 space
Zero Level

70 dB

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

Brüel & Kjær

