

**JBL
Engineering**

Engineering Standard

Date Effective

8/5/96

Number

1714

**Engineering Design
Specification**

Date Revised

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Model: 2251 J 10 inch Low/mid transducer

Frequency Response: See Attached curves, page 3 & 4

Response window: 50-190 Hz 1 octave av 36 dB/octave + 2dB - 2dB
 200-990 Hz 1/3 octave avg 36 dB/octave + 1dB - 1dB
 1-1.990 kHz 1/3 octave avg 36 dB/octave + 1dB - 1dB
 2-3.990 kHz 1 octave av 36 dB/octave + 2dB - 2dB

Impedance: See attached curve, page 3

D.C. Resistance: 12.65 Ohms

Theile- Small Params: See Page 2

Flux Density: 149,000 Maxwells in .3" thick top plate

Free Air Resonance: 61 Hertz before Power test
 61 Hertz after Power test

Motional Impedance: 196 Ohms

Minimum Impedance: 16.5 Ohms @ 414 Hz.

Polarity: EIA Std. (Positive voltage to RED terminal gives forward diaphragm motion.)

Power Test: 80 RMS 200 - 2k Hz. pink noise
 6 dB Crest factor, 2 hr duration. 388 watts
 in free air

Weight: lbs

LTR	DESCRIPTION	DATE	APPR
A	INITIAL RELEASE	8/5/96	DEB

Design Engineer

David Blore

Model 2251 J 10 inch Low/mid transducer

Theile - Small Parameters

	Before power test	After power test	
Re:	12.65	12.65	Ohms
Fs:	61	61	Hertz
Qts:	0.2	0.2	
Qms:	4	3.4	
Qes:	0.21	0.22	
Vas:	See A.P.T.	1.011	Cu. Ft.
No:	See A.P.T.	2.894094392	%
Sd:	See A.P.T.	0.031	Sq Meters
Mms:	See A.P.T.	0.032	Kg
BL:	See A.P.T.	26.77	T M
Le:	n/a (purely resistive at 1 khz)		
Xmax:	See A.P.T.	5.7	mm @10% THD

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Model 2251 J
10 inch Low/mid transducer
4.06VRMS
10 Cu. Ft. Sealed Enclosure in 1/2 space
Zero level 70 dB

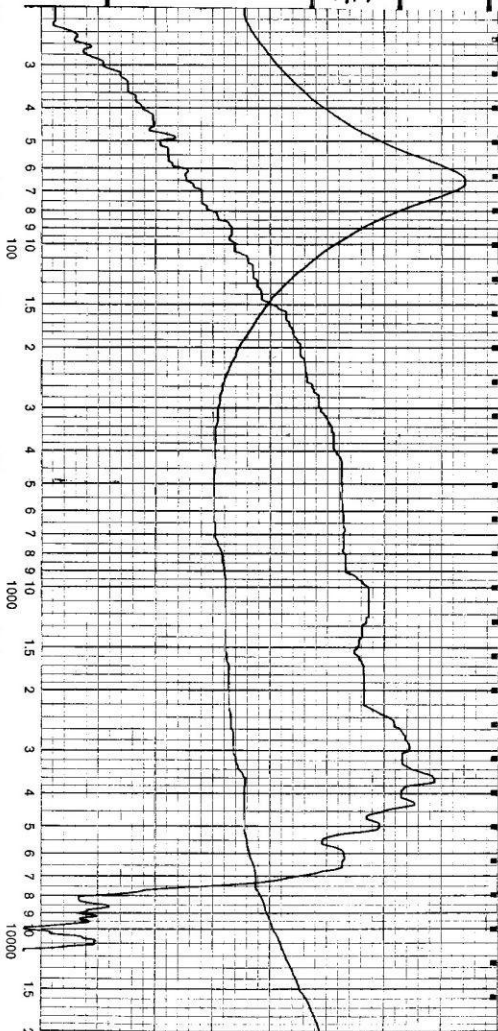
Impedance
Zero level 3.16 Ohms

Brüel & Kjær
Copenhagen

Measuring Object: 10" DCD #4 EPA
16.5 m @ 414 Hz
4.06 m @ 14

Rec. Nr.: BSKL
Date: 7-16-96
Signature: T.M.
Rectifier:
Zero Level: 70
Lower Lim. Frequency:
Potentiometer Range:
Writing Speed:
Paper Speed:

QP 1125



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Model 2251 J
 10 inch Low/mid transducer
 40.6 V @ 1 meter
 100 Watts at 16.5 ohms
 10 Cu. Ft. Sealed Enclos dB
 Zero Lev 80
 Distortion raised 20dB
 Red = 2nd Harmonic
 Blue = 3rd Harmonic

Brüel & Kjær
 Copenhagen

Measuring Object: 10" DCD #9 EPR

16.5 m e 419 Hz

40.6 v e 10

H.D. 20

RED = 21 + BLUE = 31

Nr. B + K1

Date: 7-16-96

Signature: T.A.

Level: 90

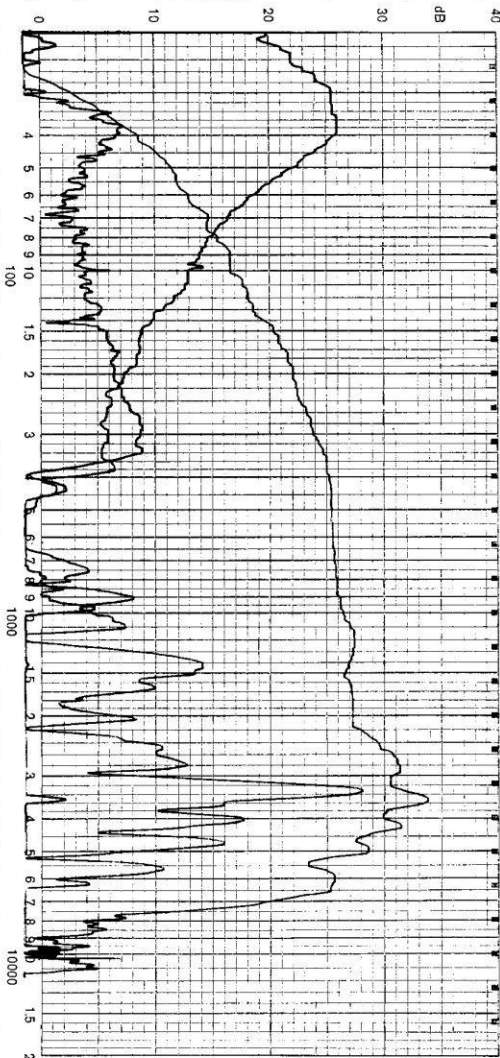
Upper Lim. Frequency:

Antenna Range:

Rotating Speed:

Rev Speed:

QP 1125



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