

# Basic Report

Driver Name:

LF10G251 8 OHM GS

Large Signal Identification

Power Test, Auralization,

Linear Parameter Measurement

Measurement: LPM Woofer T/S (Sp2)



Measurement Comment: Measures linear parameters of woofers.

Driver connected to output SPEAKER 2.

Name	Value	Unit	Comment
Electrical Parameters			
Re	3.82	Ohm	electrical voice coil resistance at DC
Le	0.794	mH	frequency independent part of voice coil inductance
L2	1.128	mH	para-inductance of voice coil
R2	3.83	Ohm	electrical resistance due to eddy current losses
Cmes	258.26	µF	electrical capacitance representing moving mass
Lces	25.06	mH	electrical inductance representing driver compliance
Res	92.95	Ohm	resistance due to mechanical losses
fs	62.6	Hz	driver resonance frequency
Mechanical Parameters			
(using laser)			
Mms	50.641	g	mechanical mass of driver diaphragm assembly including air load and voice coil
Mmd (Sd)	43.357	g	mechanical mass of voice coil and diaphragm without air load
Rms	2.110	kg/s	mechanical resistance of total-driver losses

Cms	0.128	mm/N	mechanical compliance of driver suspension
Kms	7.82	N/mm	mechanical stiffness of driver suspension
Bl	14.003	N/A	force factor (Bl product)
Lambda s	0.069		suspension creep factor
Loss factors			
Qtp	0.377		total Q-factor considering all losses
Qms	9.436		mechanical Q-factor of driver in free air considering Rms only
Qes	0.388		electrical Q-factor of driver in free air considering Re only
Qts	0.373		total Q-factor considering Re and Rms only
Other Parameters			
Vas	21.6981	l	equivalent air volume of suspension
n0	1.317	%	reference efficiency (2 pi-radiation using Re)
Lm	93.40	dB	characteristic sound pressure level (SPL at 1m for 1W @ Re)
Lnom	96.60	dB	nominal sensitivity (SPL at 1m for 1W @ Zn)
rmse Z	10.27	%	root-mean-square fitting error of driver impedance Z(f)
rmse Hx	2.33	%	root-mean-square fitting error of transfer function Hx (f)
Series resistor	0.00	Ohm	resistance of series resistor
Sd	346.36	cm <sup>2</sup>	diaphragm area

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POWER TEST PARAMETERS											
P/N	Model	Resistance	Power	Volt	Range	Crest factor	Z min	Test	Test duration	Sweep from Hz	NOTE
21111378	LF10G251	5,20	300	37,15	70-700	SI	4,60	AES	2h	20-500	