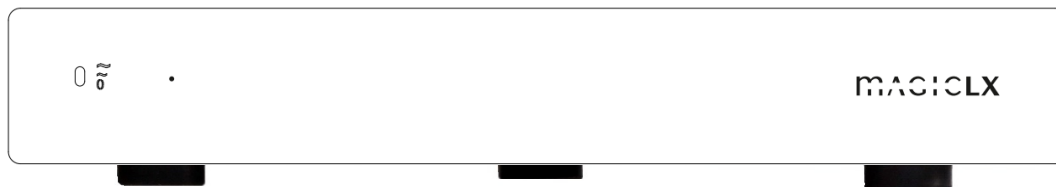


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precision analog



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3.4 Ncore Amplifier Specifications

Parameter	Remarks	Symbol	Min	Typ	Max	Unit	Note
Max Output Power	1KHz, THD=1%, All channels driven. Per channel.	$P_{R, 2\Omega}$	-	-	180	W_{rms}	1)4)
		$P_{R, 4\Omega}$	-	-	250	W_{rms}	1)
		$P_{R, 8\Omega}$	-	-	200	W_{rms}	1)5)
Continuous Output Power	Per channel, 25°C ambient temperature.	$P_{R, cont}$	-	50	-	W_{rms}	2)
Distortion	<10Hz-20kHz AES17 $P_{out} < P_{R}/2$	THD+N	-	0.0015	0.0024	%	3)
	<10Hz-20kHz AES17 $P_{out} = 1W$		-	-	0.0015	%	3)
CMRR			-	71	-	dB	
Signal-to-Noise Ratio	<10Hz-20kHz AES17		-	121	-	dB	
Output Noise	Unwt'd, <10Hz-20kHz AES17, 0Ω termination	U_N	-	-	30μ	V	
Output Impedance	f<1kHz	Z_{OUT}	-	-	1.5	mΩ	
	f<20kHz		-	-	3.5	mΩ	
Power Bandwidth		PBW		20-35k		Hz	
Frequency Response	+0/-3dB. All loads.		10	-	50k	Hz	
Voltage Gain		A_V	25	25.5	26	dB	
Efficiency	Full power	η	-	92	-	%	
Idle Losses	Per channel	P_0	-	3.5	-	W	
Current Limit per Ch	Hiccup after limiting 40ms		-	17.5	-	A	

Note 1: The stimulus signal is a continuous 1 kHz sine wave. The true rms output voltage is measured across a load resistor. Max output power is time limited due to thermal properties.

Note 2: Typically, this is 1/5 of the peak output power. Apply sufficient cooling.

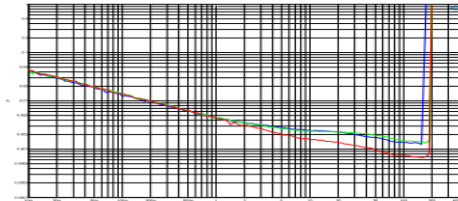
Note 3: An Audio Precision AES17 20 kHz is used during this measurement.

Note 4: Current limited.

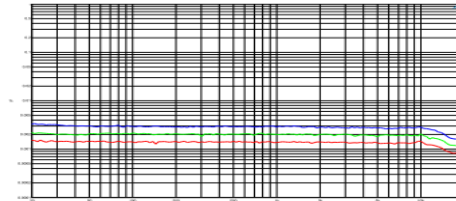
Note 5: Voltage limited

Parameter	Remarks	Symbol	Min	Typ	Max	Unit	Note
Input Impedance	Either input to ground	Z_{IN}		47k		Ω	
Loudspeaker impedance range		$Z_{L, SE}$	2	4	-	Ω	

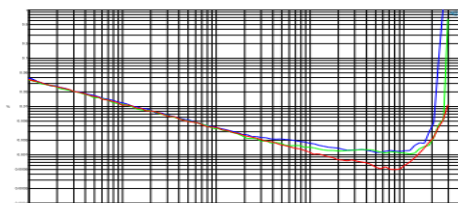
Typical Performance Graphs



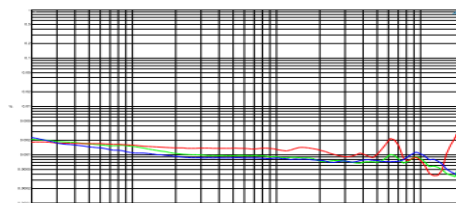
THD+N vs. power at 100Hz (blue), 1kHz (green) and 6kHz (red) (2Ω).



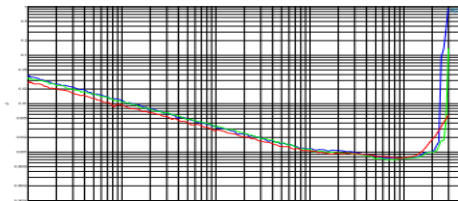
THD+N vs. Frequency at 1W in 2Ω (blue), 4Ω (green) and 8Ω (red).



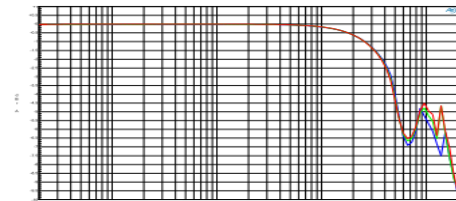
THD+N vs. power at 100Hz (blue), 1kHz (green) and 6kHz (red) (4Ω).



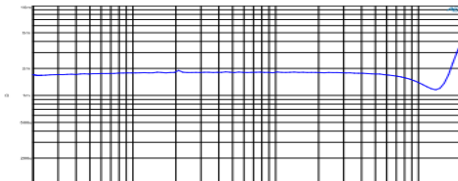
THD+N vs. Frequency at $P_{R}/2$ in 2Ω (blue), 4Ω (green) and 8Ω (red).



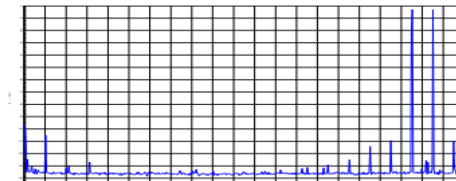
THD+N vs. power at 100Hz (blue), 1kHz (green) and 6kHz (red) (8Ω).



Frequency response in 2Ω (blue), 4Ω (green) and 8Ω (red).



Output impedance



IMD spectrum at 18.5kHz + 19.5kHz, $P_{R}/2$ in 4Ω (blue).

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