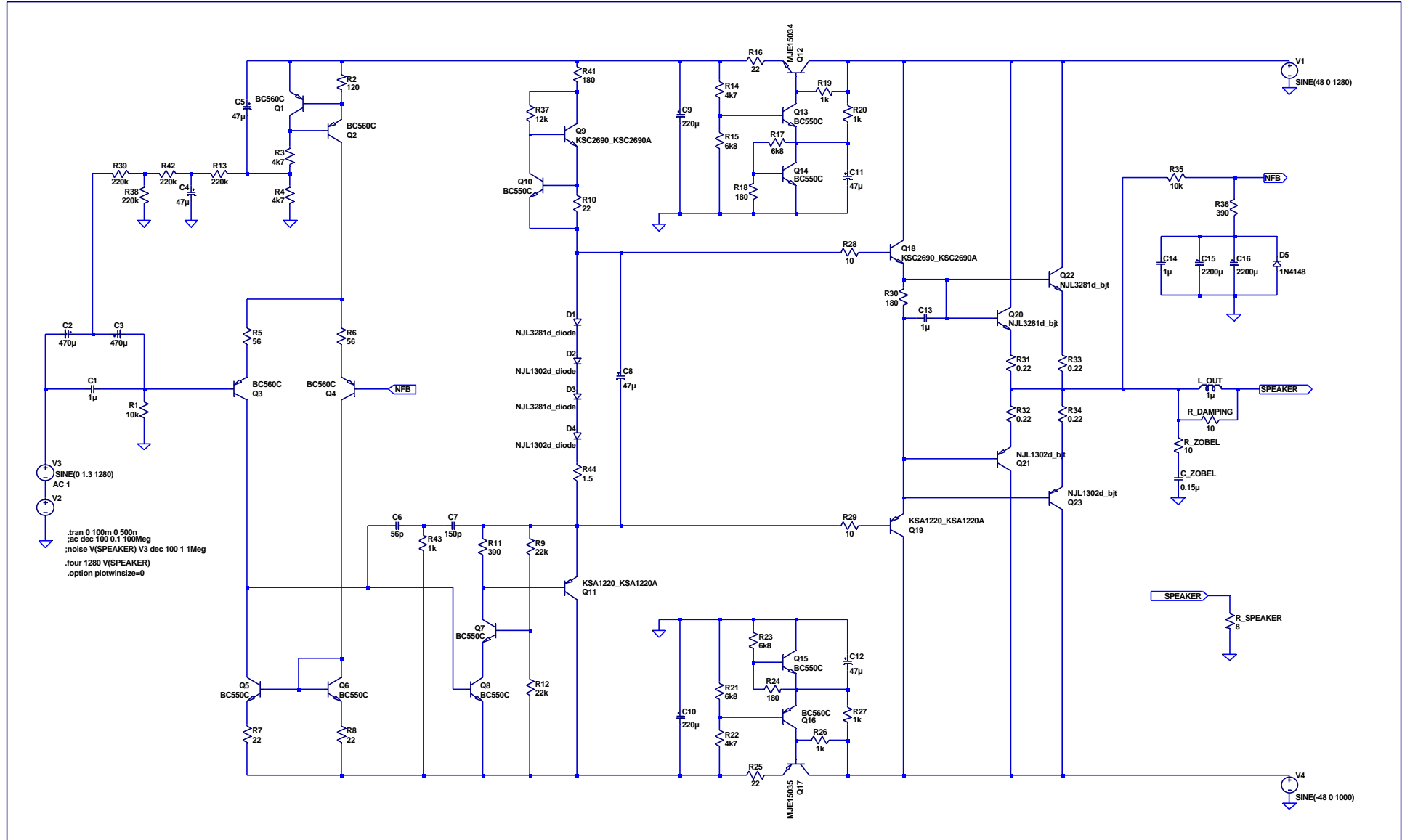


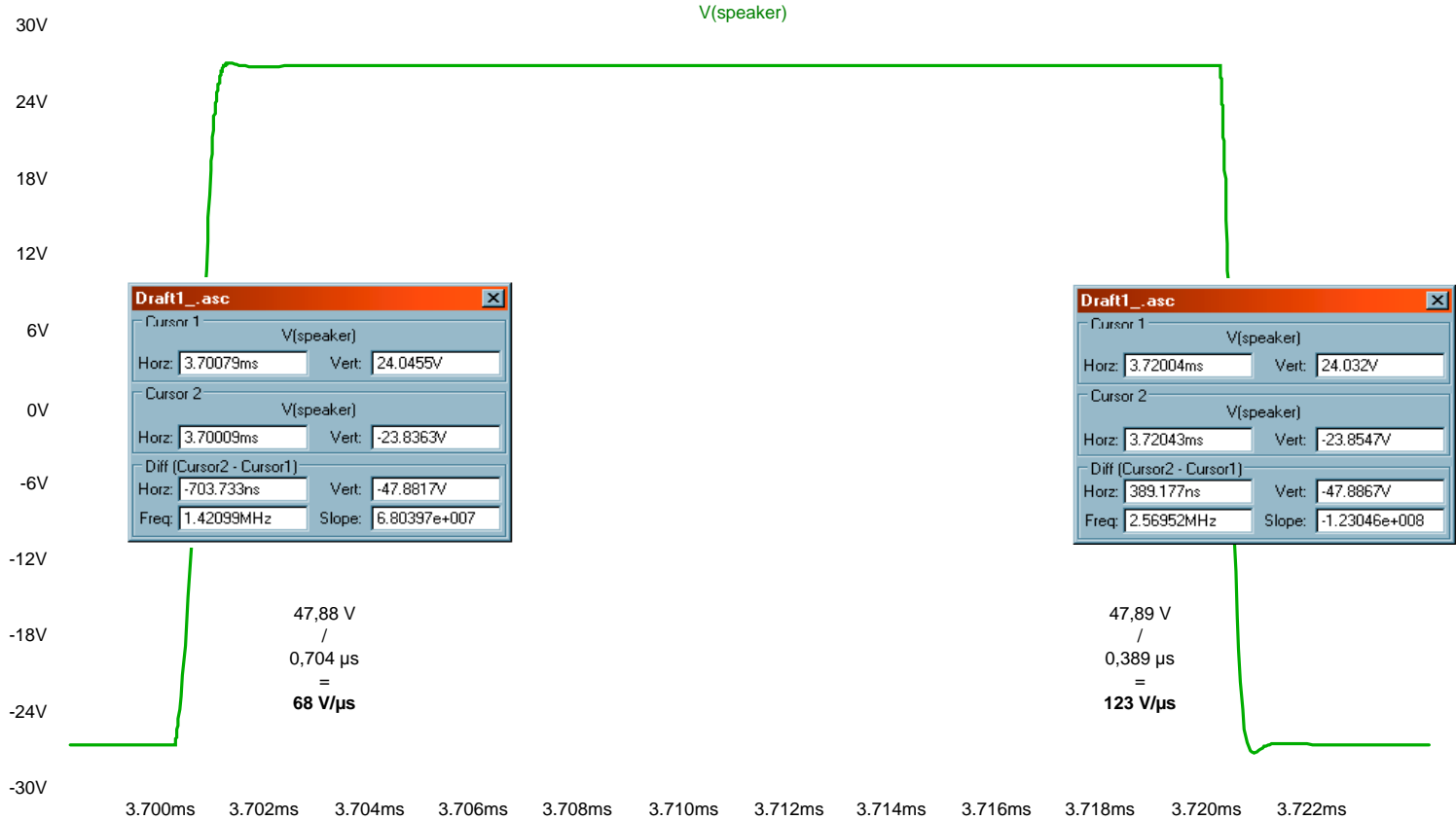
# Schematics



THD @ 80hm

Input	Output	Signal Frequency											[Hz]
[V sinus]	[V sinus]	[W rms]	40	80	160	320	640	1280	2560	5120	10240	20480	
1,5	40	100	0,001746	0,000586	0,000332	0,000332	0,000311	0,000390	0,000603	0,001105	0,002159	0,004323	
0,150	4	1	0,001706	0,000423	0,000116	0,000031	0,000029	0,000034	0,000046	0,000077	0,000145	0,000285	
0,0150	0,4	0,01	0,001723	0,000433	0,000108	0,000026	0,000008	0,000004	0,000005	0,000008	0,000015	0,000037	

Slew Rate



Load  
8 Ohm

		V in [V]	0.015	0.0475	0.15	0.475	0.75	1.5
		V out [V]	0.4	1.265	4	12.65	20	40
		P out [W]	0.010	0.100	1.000	10	25	100
40 Hz	400n							
Harmonics	Weight (K/4)							
K2	1	1,172E-05	1,168E-05	1,146E-05	1,109E-05	1,28E-05	1,25E-05	
K3	2.25	7,822E-06	7,822E-06	7,830E-06	7,851E-06	7,72E-06	6,41E-06	
K4	4	5,866E-06	5,866E-06	5,868E-06	5,878E-06	5,80E-06	6,06E-06	
K5	6.25	4,693E-06	4,692E-06	4,694E-06	4,694E-06	4,68E-06	5,01E-06	
K6	9	3,910E-06	3,910E-06	3,911E-06	3,910E-06	3,91E-06	3,30E-06	
K7	12.25	3,352E-06	3,352E-06	3,352E-06	3,352E-06	3,35E-06	3,37E-06	
K8	16	2,933E-06	2,933E-06	2,933E-06	2,933E-06	2,93E-06	3,09E-06	
K9	20.25	2,607E-06	2,607E-06	2,607E-06	2,608E-06	2,60E-06	2,52E-06	
THD		0,001723	0,001720	0,001706	0,001682	0,001791	0,001746	
Weighted THD		0,009885	0,009884	0,009883	0,009880	0,009883	0,009851	

80 Hz	200n							
Harmonics	Weight (K/4)							
K2	1	2,963E-06	2,948E-06	2,810E-06	2,919E-06	3,92E-06	3,47E-06	
K3	2.25	1,956E-06	1,954E-06	1,958E-06	1,961E-06	1,88E-06	3,77E-06	
K4	4	1,467E-06	1,466E-06	1,466E-06	1,466E-06	1,47E-06	2,18E-06	
K5	6.25	1,174E-06	1,172E-06	1,171E-06	1,174E-06	1,17E-06	6,31E-07	
K6	9	9,775E-07	9,772E-07	9,766E-07	9,771E-07	9,78E-07	7,30E-07	
K7	12.25	8,388E-07	8,377E-07	8,367E-07	8,382E-07	8,38E-07	1,13E-06	
K8	16	7,331E-07	7,329E-07	7,328E-07	7,328E-07	7,33E-07	9,11E-07	
K9	20.25	6,517E-07	6,516E-07	6,510E-07	6,512E-07	6,52E-07	6,05E-07	
THD		0,000433	0,000432	0,000423	0,000430	0,000500	0,000586	
Weighted THD		0,002472	0,002470	0,002467	0,002471	0,002481	0,002779	

160 Hz	100n							
Harmonics	Weight (K/4)							
K2	1	7,361E-07	6,410E-07	8,542E-07	9,310E-07	7,16E-07	1,37E-06	
K3	2.25	4,884E-07	4,893E-07	4,862E-07	5,140E-07	4,01E-07	2,17E-06	
K4	4	3,659E-07	3,657E-07	3,668E-07	3,649E-07	3,64E-07	1,39E-06	
K5	6.25	2,922E-07	2,908E-07	2,907E-07	2,929E-07	2,96E-07	1,12E-06	
K6	9	2,442E-07	2,442E-07	2,433E-07	2,433E-07	2,43E-07	8,30E-07	
K7	12.25	2,080E-07	2,097E-07	2,101E-07	2,084E-07	2,09E-07	5,87E-07	
K8	16	1,833E-07	1,837E-07	1,831E-07	1,831E-07	1,82E-07	3,98E-07	
K9	20.25	1,625E-07	1,609E-07	1,632E-07	1,621E-07	1,63E-07	2,56E-07	
THD		0,000108	0,000102	0,000116	0,000123	0,000103	0,000332	
Weighted THD		0,000616	0,000614	0,000619	0,000619	0,000614	0,001676	

320 Hz	50ns							
Harmonics	Weight (K/4)							
K2	1	1,638E-07	1,141E-07	2,410E-07	8,121E-07	1,47E-06	1,35E-06	
K3	2.25	1,235E-07	1,169E-07	1,252E-07	1,017E-07	1,43E-07	2,02E-06	
K4	4	9,142E-08	9,153E-08	9,180E-08	9,276E-08	9,58E-08	1,22E-06	
K5	6.25	7,345E-08	7,236E-08	6,939E-08	7,390E-08	7,34E-08	9,75E-07	
K6	9	6,135E-08	6,117E-08	6,127E-08	6,000E-08	6,31E-08	6,72E-07	
K7	12.25	5,092E-08	5,634E-08	5,058E-08	5,320E-08	5,39E-08	4,38E-07	
K8	16	4,542E-08	4,579E-08	4,587E-08	4,678E-08	4,49E-08	2,47E-07	
K9	20.25	3,977E-08	4,032E-08	4,100E-08	4,152E-08	4,02E-08	1,21E-07	
THD		0,000026	0,000023	0,000031	0,000083	0,000148	0,000301	
Weighted THD		0,000152	0,000155	0,000154	0,000175	0,000213	0,001306	

640 Hz	20ns							
Harmonics	Weight (K/4)							
K2	1	6,779E-08	1,333E-07	2,843E-07	9,441E-07	1,49E-06	1,71E-06	
K3	2.25	3,046E-08	3,223E-08	3,702E-08	7,324E-09	1,24E-07	1,98E-06	
K4	4	2,269E-08	2,324E-08	2,256E-08	2,180E-08	3,04E-08	1,18E-06	
K5	6.25	1,764E-08	1,867E-08	1,858E-08	1,961E-08	2,21E-08	9,08E-07	
K6	9	1,504E-08	1,537E-08	1,562E-08	1,360E-08	1,70E-08	6,10E-07	
K7	12.25	1,306E-08	1,487E-08	1,272E-08	1,292E-08	1,31E-08	4,10E-07	
K8	16	1,193E-08	1,179E-08	1,153E-08	1,092E-08	1,01E-08	2,07E-07	
K9	20.25	1,080E-08	1,360E-08	9,428E-09	8,931E-09	9,14E-09	8,23E-08	
THD		0,000008	0,000014	0,000029	0,000094	0,000150	0,000311	
Weighted THD		0,000040	0,000046	0,000047	0,000101	0,000156	0,001210	

1280 Hz	10ns							
Harmonics	Weight (K/4)							
K2	1	4,215E-08	1,031E-07	3,388E-07	1,069E-06	1,68E-06	2,67E-06	
K3	2.25	5,842E-09	8,347E-09	1,368E-08	6,186E-08	1,71E-07	2,22E-06	
K4	4	4,299E-09	5,309E-09	5,736E-09	7,282E-09	1,87E-08	1,23E-06	
K5	6.25	3,307E-09	4,248E-09	3,876E-09	5,623E-09	1,79E-08	9,71E-07	
K6	9	2,868E-09	3,445E-09	3,854E-09	3,451E-09	1,58E-09	6,42E-07	
K7	12.25	2,408E-09	2,946E-09	3,371E-09	2,951E-09	1,29E-09	4,14E-07	
K8	16	2,267E-09	2,444E-09	2,658E-09	5,122E-09	5,59E-09	2,27E-07	
K9	20.25	1,831E-09	2,396E-09	2,503E-09	4,780E-09	3,10E-09	8,98E-08	
THD		0,000004	0,000010	0,000034	0,000107	0,000169	0,000390	
Weighted THD		0,000008	0,000014	0,000035	0,000109	0,000173	0,001300	

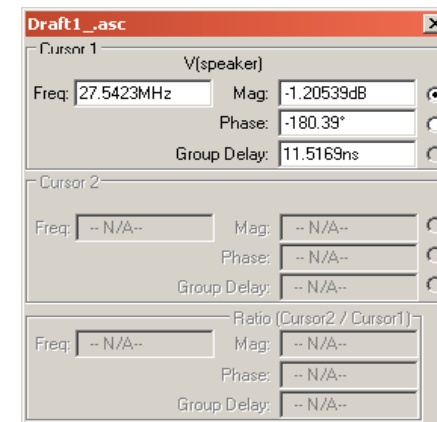
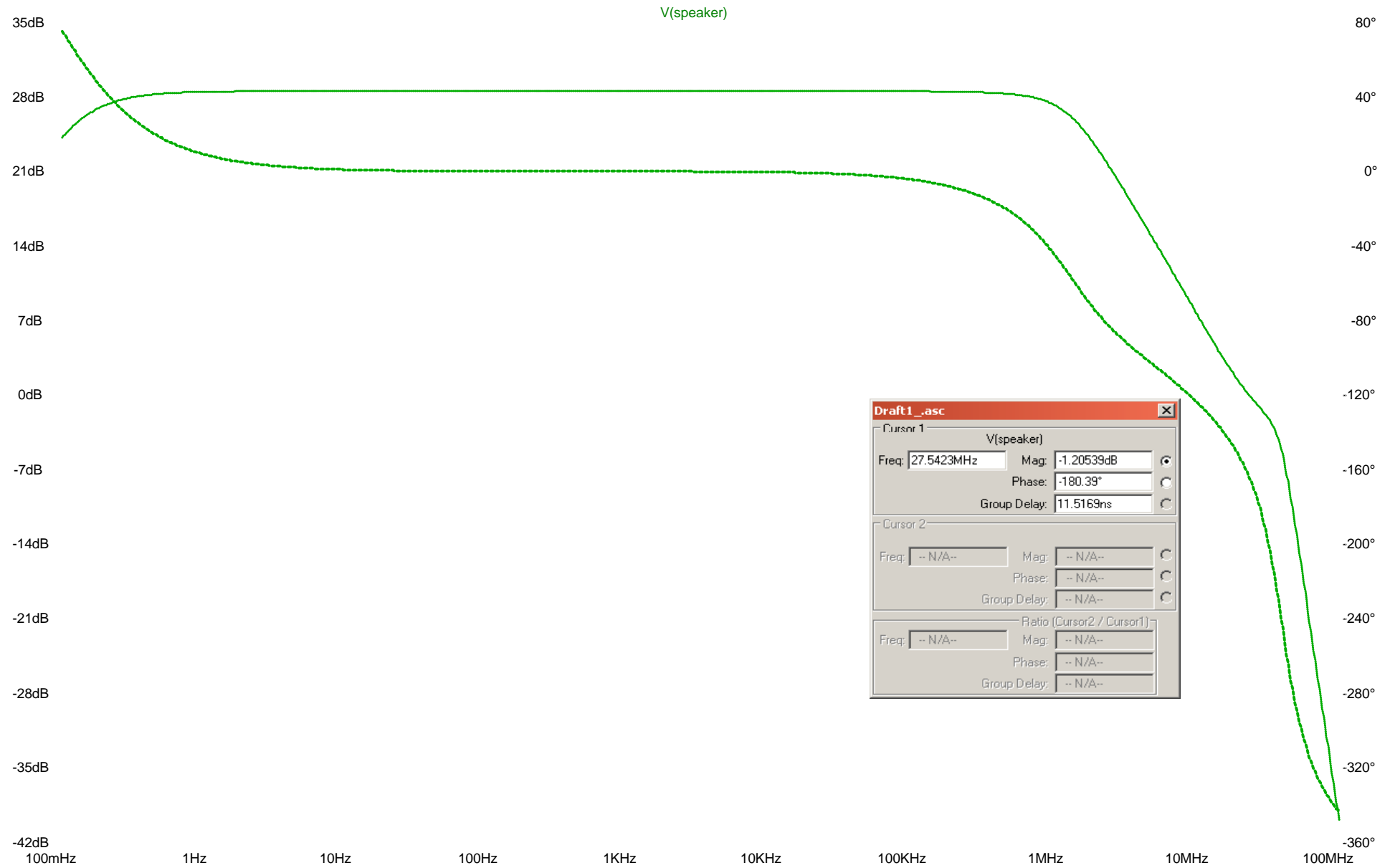
2560 Hz	5ns							
Harmonics	Weight (K/4)							
K2	1	4,607E-08	1,424E-07	4,638E-07	1,435E-06	2,30E-06	4,88E-06	
K3	2.25	1,463E-09	4,336E-09	1,638E-08	9,549E-08	2,85E-07	2,89E-06	
K4	4	4,704E-09	1,333E-09	5,428E-09	7,563E-09	4,60E-08	1,47E-06	
K5	6.25	2,645E-09	3,060E-09	4,014E-09	7,579E-09	2,83E-08	1,13E-06	
K6	9	2,805E-09	1,767E-09	1,959E-09	9,189E-09	9,89E-09	6,78E-07	
K7	12.25	3,741E-09	3,456E-09	1,886E-09	4,922E-09	8,10E-09	4,84E-07	
K8	16	3,643E-09	1,349E-09	6,560E-10	4,008E-09	8,09E-09	2,25E-07	
K9	20.25	1,370E-09	1,463E-09	3,074E-09	1,372E-09	8,91E-09	1,21E-07	
THD		0,000005	0,000014	0,000046	0,000144	0,000232	0,000603	
Weighted THD		0,000010	0,000016	0,000047	0,000146	0,000242	0,001556	

5120 Hz	2ns							
Harmonics	Weight (K/4)							
K2	1	7,609E-08	2,464E-07	7,609E-07	2,403E-06	3,90E-06	9,54E-06	
K3	2.25	1,621E-09	6,889E-09	2,096E-08	2,007E-07	5,69E-07	4,73E-06	
K4	4	1,030E-09	8,821E-10	2,164E-08	1,876E-08	1,07E-07	2,19E-06	
K5	6.25	9,158E-10	7,030E-10	2,279E-08	2,863E-08	9,47E-08	1,61E-06	
K6	9	7,122E-10	4,873E-10	3,342E-08	2,134E-08	5,45E-08	8,14E-07	
K7	12.25	6,622E-10	4,261E-10	4,450E-08	7,702E-09	3,20E-08	7,24E-07	
K8	16	5,501E-10	3,688E-10	5,426E-08	1,806E-08	6,10E-08	2,62E-07	
K9	20.25	3,756E-10	2,844E-10	6,406E-08	3,349E-08	7,37E-08	1,84E-07	
THD		0,000008	0,000025	0,000077	0,000241	0,000395	0,001105	
Weighted THD		0,000008	0,000025	0,000185	0,000257	0,000458	0,002336	

10240 Hz	1ns							
Harmonics	Weight (K/4)							
K2	1	1,451E-07	4,599E-07	1,448E-06	4,547E-06	7,39E-06	1,80E-05	
K3	2.25	8,551E-10	1,784E-08	8,539E-08	5,320E-07	1,22E-06	8,91E-06	
K4	4	1,909E-09	1,082E-09	4,809E-08	1,111E-07	2,11E-07	3,91E-06	
K5	6.25	1,312E-09	9,670E-10	4,806E-08	1,624E-07	3,06E-07	2,73E-06	
K6	9	1,216E-09	5,189E-10	6,363E-09	1,201E-07	1,06E-07	1,23E-06	
K7	12.25	1,030E-09	2,374E-10	1,583E-08	8,056E-08	2,41E-07	1,46E-06	
K8	16	9,601E-10	2,816E-10	3,573E-09	1,085E-07	1,20E-07	3,93E-07	
K9	20.25	7,510E-10	4,006E-10	2,790E-09	6,778E-08	1,69E-07	3,57E-07	
THD		0,000015	0,000046	0,000145	0,000459	0,000751	0,002159	
Weighted THD		0,000015	0,000046	0,000152	0,000551	0,000956	0,004276	

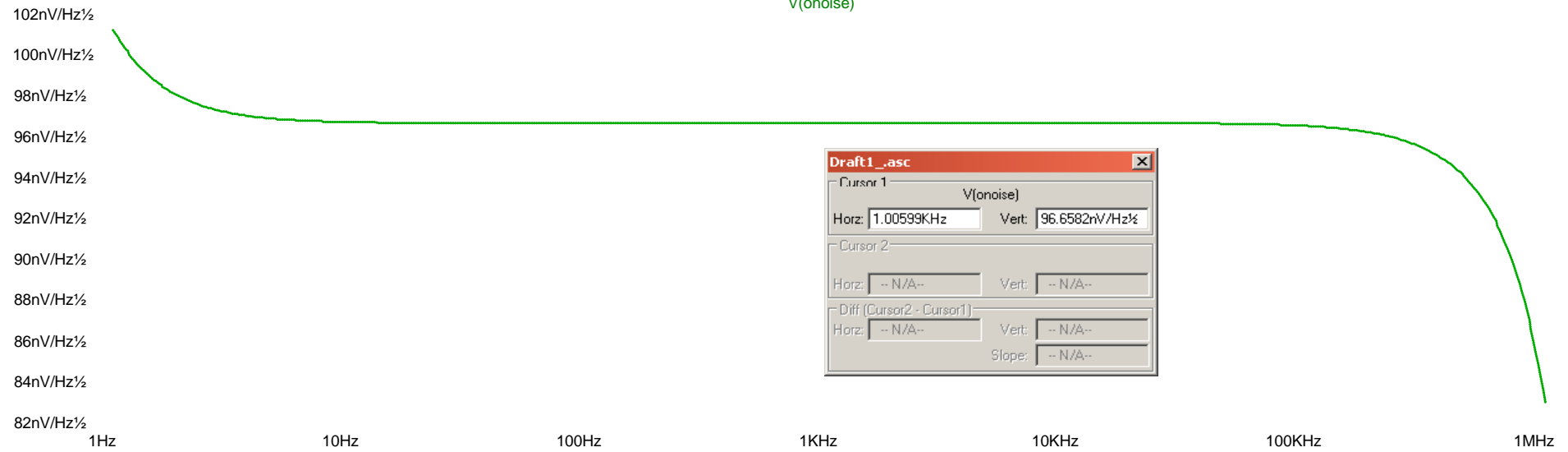
20480 Hz		0.5n						
Harmonics	Weight (K/4)							
K2		3.516E-07	9.011E-07	2.826E-06	8.960E-06	1.46E-05	3.80E-05	
K3	2.25	5.837E-08	5.141E-08	2.533E-07	1.824E-06	3.13E-06	1.80E-05	
K4	4	5.856E-08	1.028E-08	2.086E-07	4.432E-07	5.24E-07	7.58E-06	
K5	6.25	5.343E-08	7.841E-09	1.745E-07	8.844E-07	1.47E-06	4.73E-06	
K6	9	4.849E-08	4.428E-09	3.615E-08	4.921E-07	4.11E-07	2.22E-06	
K7	12.25	4.417E-08	4.121E-09	6.915E-08	4.798E-07	1.27E-06	3.99E-06	
K8	16	4.044E-08	4.015E-09	1.152E-08	4.696E-07	4.87E-07	8.24E-07	
K9	20.25	3.700E-08	3.631E-09	1.532E-08	2.735E-07	9.80E-07	1.48E-06	
THD		0.00037	0.00090	0.00285	0.000924	0.00151	0.00433	
Weighted THD		0.000133	0.00092	0.00334	0.001650	0.003258	0.009341	

BodePlot



Noise

V(onoise)



Clipping

V(speaker)

