

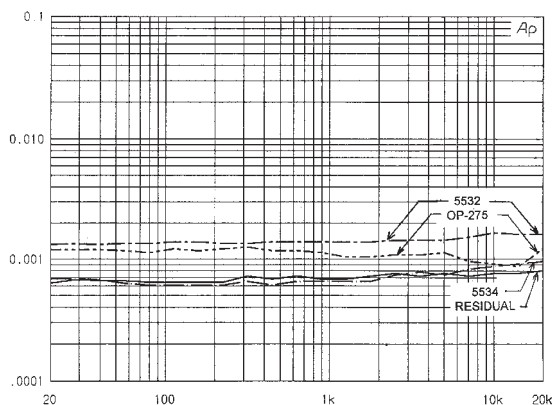


Figure 6-42: B driver group, THD + N (%) versus frequency (Hz), for $V_{OUT} = 7\text{ V rms}$, $R_S = 909\ \Omega$, $R_L = 500\ \Omega$, $V_S = \pm 18\text{ V}$

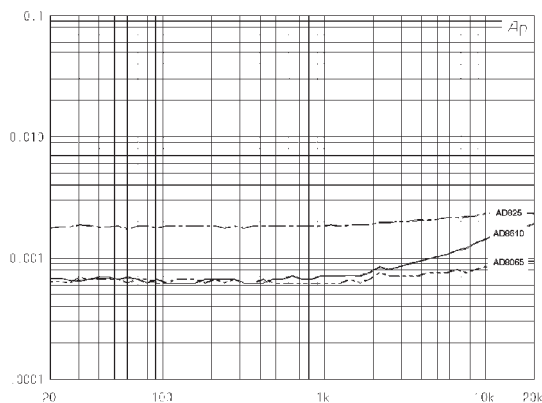


Figure 6-43: C driver group, THD + N (%) versus frequency (Hz), for $V_{OUT} = 7\text{ V rms}$, $R_S = 909\ \Omega$, $R_L = 500\ \Omega$, $V_S = \pm 13\text{ V}$ or $\pm 18\text{ V}$

Single-Ended Line Drivers

This section discusses a variety of line driver circuit examples that drive single-ended lines, optimized for different operating environments, supply voltages, and performance.

Consumer Equipment Line Driver

One common driver application is a line output stage for consumer preamps, CD, and DVD players, and so forth. This is typically an economical audio stage with a nominal gain of 5 to 10 times, operating from supplies of $\pm 10\text{ V}$ to $\pm 18\text{ V}$, usually with a rated output of 2 V rms – 3 V rms , and a capability of driving loads of $10\text{ k}\Omega$ or more.

For simplicity of biasing and minimum output dc offset, ac-coupling is used, and the circuit is typically fed from a volume control. For stereo operation, a dual channel device is typically sought for this type application, one which is also optimized for audio uses.