

0.1 Part 3

Decoupling capacitors should be used in practice for amplifier designs to prevent the output signal from having a DC bias that may affect later circuit stages. When a load resistance is added to the output, the gain is going to drop significantly due to the formation of a voltage divider with the amplifier's output resistance. One way to remedy this with common-source amplifiers is to add a common-drain amplifier stage to its output because common-drain amplifiers typically have lower output resistances. The data and oscilloscope plots confirm these claims.