



SINGLE SUPPLY AD8336 APPLICATION

THE CIRCUIT ABOVE SHOWS CONNECTIONS TO POWER THE DUAL SUPPLY AD8336 FROM A SINGLE 5V SUPPLY. THE TRICK IS TO ESTABLISH A STABLE HALF SUPPLY TO REPLACE THE GROUND CONNECTION NORMALLY USED BY THE DEVICE. BECAUSE CURRENT THROUGH THE VCOM IS AT PARTIALLY BI-POLAR, ANY CIRCUIT REPLACING THE GROUND MUST BE VERY LOW NOISE AND IMPEDANCE. ANY VARIATION WILL BE REFLECTED IN THE DESIRED SIGNAL. AN OP-AMP OUTPUT CIRCUIT MUST BE BIPOLAR (i.e., "PUSH-PULL") SO AS TO SOURCE AND SINK CURRENT. TYPICAL 'COMMON' CONNECTIONS ARE LOW CURRENT, ALTHOUGH THE LOAD CURRENT WILL ALSO BE REFLECTED IN THE OP-AMP IF REFERENCED TO THE MID-SUPPLY SOURCE.

THIS IMPLEMENTATION HASN'T BEEN TESTED, HOWEVER A SIMILAR CIRCUIT FOR THE AD8337 HAS.