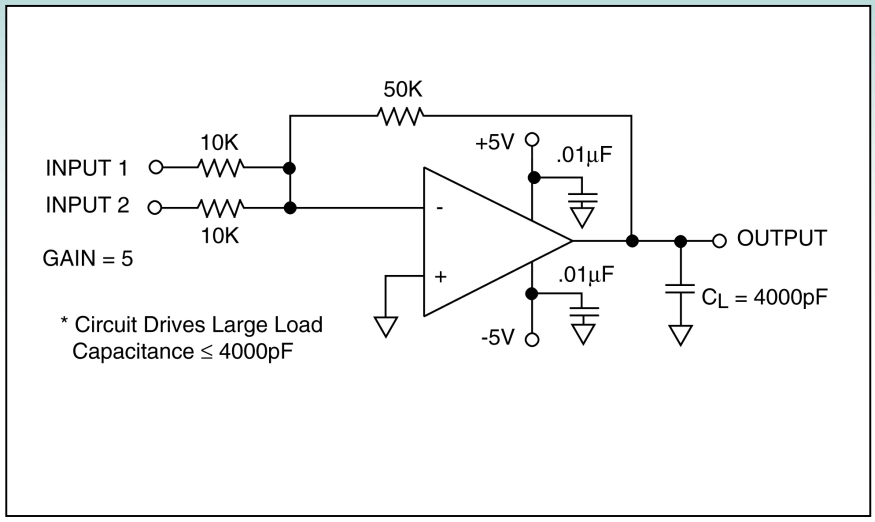
Category: Amplifiers **CIRCUIT IDEAS FOR DESIGNERS** Schematic no. amp_27005.0

Low Offset Summing Amplifier



Description

This circuit presents a low offset DC summing amplifier. In this summing amplifier, the input leakage currents of the operational amplifier are not a factor since the input resistor values are at 10Kohm. The input offset voltage of the operational amplifier would cause an error in the output of the summing amplifier. Note also that the output loading is a capacitor at 4000pF, which could cause stability problems for many operational amplifiers and result in oscillation. Select an operational amplifier that has both very low input offset voltages and a robust output driver for this circuit. The operational amplifier must also have a high phase margin and a settling time specification, which reduces any possibility of extraneous oscillation or ringing that may occur under a specific combination in various loading conditions. For less error at the output, select low offset voltage versions or "A" grade version of the operational amplifiers.

Recommended Components

ALD1702, ALD1704, ALD1712, ALD2702, ALD2704, ALD4702, ALD4704
Precision versions: ALD1702A, ALD1704A, ALD1712, ALD2711, ALD2722, ALD2724, ALD4702A, ALD4704A

Other Related Circuit Ideas

Schematic no. amp_27003.0 High Input Impedance Precision DC Summing Amplifier