



LinearDimensions
SEMICONDUCTOR

LND-OP28

Dual 5A, 44V, BiCMOS Operational Amplifiers

GENERAL DESCRIPTION

The LND-OP28 are dual 5A, 44V, power operational amplifiers on a shared substrate. Putting two power op amps on one die results in an extremely cost effective solution for applications requiring multiple amplifiers per board or bridge mode configurations.

The wide common mode input range includes the negative rail, facilitating single supply applications. It is possible to utilize a “ground based” input driving a single supply amplifier with ground acting as the “second” or “bottom” supply of the amplifier.

The output stages are also well protected. They include internal current limit circuits. The inputs are high impedance, with low offset voltage, and extremely low offset currents.

The LND-OP28 is available as a bare die for hybrid manufacturing or in wafer form. Linear Dimensions can offer various custom package solutions if desired, please call for more information.

LND-OP28 is rated to a junction temperature of $T_j = -40$ to 150°C .

APPLICATIONS EXAMPLE

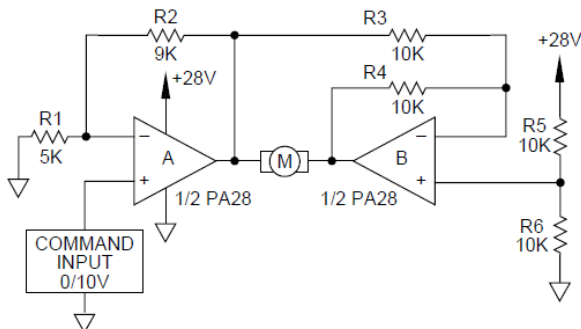


FIGURE 1: BIDIRECTIONAL SPEED CONTROL FROM A SINGLE SUPPLY

FEATURES

- Dual 5A, 44V, Operational Amplifiers
- Low Cost
- Wide Common Mode Range
 - Includes Negative Supply
- Wide Supply Voltage Range
 - Single Supply 5V to 44V
 - Split Supply: ± 2.5 to $\pm 22\text{V}$
- High Efficiency - $|V_s - 2.2\text{V}|$ at 2.5A typ
- High Output Current – 5A
- Internal Current Limit
- Low Distortion

APPLICATIONS

- Half & Full Bridge Motor Drivers
- LED Drivers
- Audio Power Amplifiers
 - Stereo – 18W RMS per channel
 - Bridge – 36W RMS per dual
- Ideal for Single Supply Systems
 - 5V – Peripherals
 - 12V – Automotive (with load dump)
 - 28V - Avionic

DIE LAYOUT

