MOSCAD

Preliminary Datasheet 11/30/2007

LD0A5T - High Power Line Driver

FEATURES

- High-power 0.5A output current
- Fully integrated
- Differential In-and Output
- Current mode input
- Internal frequency compensation
- Option for ext. BJT for higher output current
- Power-down and Standby mode
- Soft-start
- Current limiting

APPLICATIONS

- xDSL
- Communications over power lines

TECHNOLOGY: 0.18u CMOS Technology, generic/LL. Single Poly, 5 Metal

OVERVIEW

The cell is a class AB fully integrated high power line driver capable of driving a wide range of load with an output current capability up to 0.5A (min). It features differential input and differential outputs. The input signal is applied trough a current-mode interface, for easy interfacing with an integrated current-steering DAC.

Using an external 1 ohm resistor in serie with the positive output, the output current is limited by the lineariver to a well controlled value near 0.6A.

This linedriver cell includes integrated driver for an optional external BJT bridge to be placed in parallel for increasing the output current capability to more than 1A.

FUNCTIONAL BLOCK DIAGRAM

