

Features

- Drives up to 360mA from a +15V supply
- 16V_{P-P} differential output drive into 25Ω and 20V_{P-P} differential output drive into 100Ω
- -85dBc typical driver output distortion at full output at 150kHz
- Low quiescent current of 3.5mA per amplifier at 1/2-I_S current mode
- Disable down to 1.5mA

Applications

- ADSL CSA line driving
- ADSL full rate CPE line driving
- G.SHDSL, HDSL2 line driver
- Video distribution amplifier
- Video twisted-pair line driver

Ordering Information

Part No	Package	Tape & Reel	Outline #
EL1511CS	16-Pin SO (0.150")	-	MDP0027
EL1511CS-T7	16-Pin SO (0.150")	7"	MDP0027
EL1511CS-T13	16-Pin SO (0.150")	13"	MDP0027
EL1511CL	16-Pin LPP	-	MDP0046
EL1511CL-T7	16-Pin LPP	7"	MDP0046
EL1511CL-T13	16-Pin LPP	13"	MDP0046

General Description

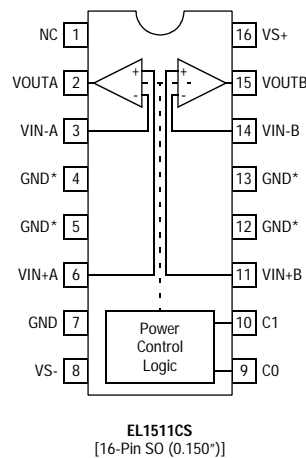
The EL1511C is a dual operational amplifier designed for customer premise line driving in DMT ADSL solutions. This device features a high drive capability of 360mA while consuming only 7.5mA of supply current per amplifier and operating from a single 5V to 15V supply. This driver achieves a typical distortion of less than -85dBc, at 150kHz into a 25Ω load. The EL1511C is available in the thermally-enhanced 16-pin SO (0.150") and a 16-pin LPP (4x4mm) packages. The EL1511C is specified for operation over the full -40°C to +85°C temperature range. Electrical characteristics are given for typical 12V supply operation.

The EL1511C has two control pins, C0 and C1, which allow the selection of full I_S power, 3/4-I_S, 1/2-I_S, and power-down modes.

The EL1511C is ideal for ADSL, SDSL, and HDSL2 line driving applications for single power supply, high voltage swing, and low power.

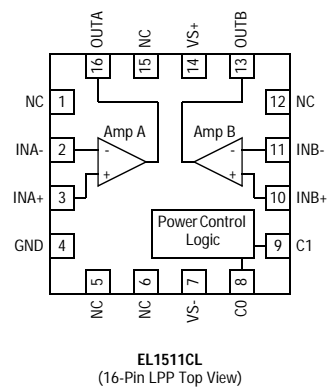
The EL1511C maintains excellent distortion and load driving capabilities even in the lowest power settings.

Connection Diagram



EL1511CS
[16-Pin SO (0.150")]

* These GND pins are heat spreaders



EL1511CL
(16-Pin LPP Top View)

Note: All information contained in this data sheet has been carefully checked and is believed to be accurate as of the date of publication; however, this data sheet cannot be a "controlled document". Current revisions, if any, to these specifications are maintained at the factory and are available upon your request. We recommend checking the revision level before finalization of your design documentation.

EL1511C - Product Brief

Medium Power Differential Line Driver

élanotec

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WARNING - Life Support Policy

Elantec, Inc. products are not authorized for and should not be used within Life Support Systems without the specific written consent of Elantec, Inc. Life Support systems are equipment intended to support or sustain life and whose failure to perform when properly used in accordance with instructions provided can be reasonably expected to result in significant personal injury or death. Users contemplating application of Elantec, Inc. Products in Life Support Systems are requested to contact Elantec, Inc. factory headquarters to establish suitable terms & conditions for these applications. Elantec, Inc.'s warranty is limited to replacement of defective components and does not cover injury to persons or property or other consequential damages.