

**élantec**  
HIGH PERFORMANCE ANALOG INTEGRATED CIRCUITS

**EL1510C - Product Brief**  
Medium Power Differential Line Driver

EL1510C - Product Brief

**Features**

- 40V<sub>p-p</sub> differential output drive into 100Ω
- -85dBc typical driver output distortion at full output at 150kHz
- Low quiescent current of 7.5mA per amplifier

**Applications**

- ADSL G.lite CO line driving
- G.SHDSL, HDSL2 line drivers
- ADSL full rate CPE line driving
- Video distribution amplifiers
- Video twisted-pair line drivers

**Ordering Information**

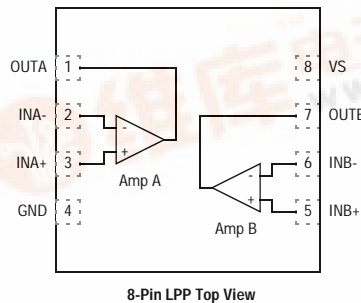
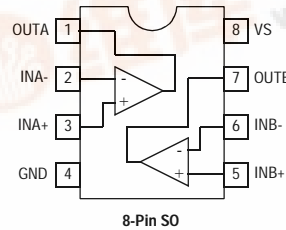
Part No	Package	Tape & Reel	Outline #
EL1510CS	8-Pin SO	-	MDP0027
EL1510CS-T7	8-Pin SO	7"	MDP0027
EL1510CS-T13	8-Pin SO	13"	MDP0027
EL1510CL	8-Pin LPP	-	MDP0047
EL1510CL-T7	8-Pin LPP	7"	MDP0047
EL1510CL-T13	8-Pin LPP	13"	MDP0047

**General Description**

The EL1510C is a dual operational amplifier designed for central office and customer premise line driving in both SDSL and ADSL solutions. This device features a high drive capability of 250mA while consuming only 7.5mA of supply current per amplifier, operating from ±12V supplies. This driver achieves a typical distortion of less than -85dBc, at 150kHz into a 25Ω load. The EL1510CL is available in the power 8-pin LPP package and is specified for operation over the full -40°C to +85°C temperature range. The LPP package has the potential for a very low junction to ambient thermal resistance of 43°C/W, making it suitable for high power applications. The EL1510CS is in the 8-pin SO package and thus is limited to applications where the power dissipation in the device is less than 781mW.

The EL1510C is ideal for CPE modem applications in ADSL, HDSL2, G.SHDSL, and VDSL.

**Connection Diagrams**



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.



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### **General Disclaimer**

Specifications contained in this data sheet are in effect as of the publication date shown. Elantec, Inc. reserves the right to make changes in the circuitry or specifications contained herein at any time without notice. Elantec, Inc. assumes no responsibility for the use of any circuits described herein and makes no representations that they are free from patent infringement.



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