

# EL1501C - Product Brief

Differential Line Driver/Receiver

#### Features

- Complete ADSL differential driver and receiver
- 45V<sub>P-P</sub> differential output drive into  $200\Omega$
- · -60dB typical output distortion at full output at 2MHz
- -73dB typical receive distortion at 15V<sub>P-P</sub> levels at 2MHz
- Drives 8 single-ended video loads, or 4 S-VHS loads, or 4 differential video loads
- Power surface-mount package

#### Applications

- ADSL line interface
- · HDSL line driver
- · Video distribution amplifier
- Video twisted-pair line driver

#### **Ordering Information**

Part No	Temp. Range	Package	Outline #
1501CM	-40°C to +85°C	20-Lead SO	MDP0027

## **General Description**

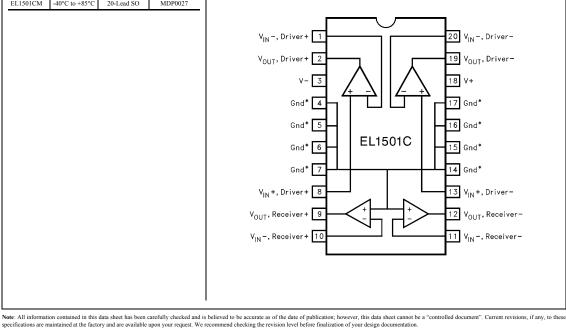
The EL1501C contains two wideband high-voltage drivers and two receive amplifiers. It is designed to drive 45V<sub>P-P</sub> signals at 2MHz into a 200 $\Omega$  load differentially with very low distortion. The receive amplifiers also provide very low distortion and noise, and with external resistors can be wired as a hybrid coupler.

All amplifiers are of the current-feedback type, giving high slewrates while consuming moderate power. They retain frequency response over a wide range of externally set gains.

The EL1501C operates on  $\pm 5V$  to  $\pm 15V$  supplies, and retains its bandwidths and linearities over the supply range.

Eight center package pins are used as ground connections and heat spreaders, allowing a dissipation of 2W at the maximum ambient temperature of 85°C.

#### **Connection Diagrams**



March 1995 Rev.

© 2001 Elantec Semiconductor, Inc

# EL1501C - Product Brief

Differential Line Driver/Receiver

### 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.



HIGH PERFORMANCE ANALOG INTEGRATED CIRCUITS

March 1995 Rev. A

#### Elantec Semiconductor, Inc.

675 Trade Zone Blvd. Milpitas, CA 95035 Telephone: (408) 945-1323 (888) ELANTEC Fax: (408) 945-9305 European Office: +44-118-977-6020 Japan Technical Center: +81-45-682-5820

#### 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.