

EL1501C - Product Brief

Differential Line Driver/Receiver

Features

- Complete ADSL differential driver and receiver
- $45V_{P\text{-}P}$ differential output drive into 200Ω
- -60dB typical output distortion at full output at 2MHz
- -73dB typical receive distortion at 15V_{P-P} 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 #
EL1501CM	-40°C to +85°C	20-Lead SO	MDP0027
	-		

General Description

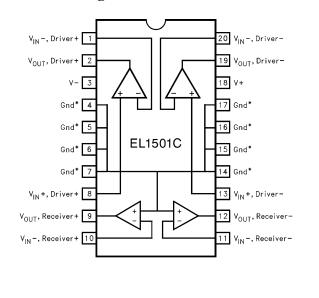
The EL1501C contains two wideband high-voltage drivers and two receive amplifiers. It is designed to drive $45V_{P\text{-}P}$ signals at 2MHz into a 200Ω load differentially with very low distortion. The receive amplifiers also provide very low distortion and noise, and with external resistors can be 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



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.

© 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.



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.

Printed in U.S.A.