élantec
HIGH PERFORMANCE ANALOG INTEGRATED CIRCUITS

EL1501C - Product Brief

Differential Line Driver/Receiver

Features

- Complete ADSL differential driver and receiver
- $45V_{P-P}$ 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

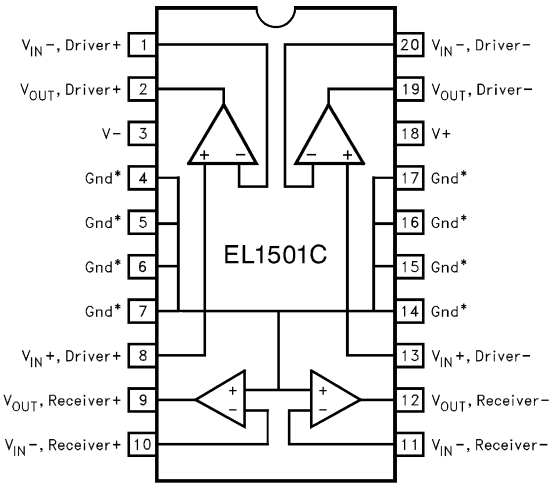
The EL1501C contains two wideband high-voltage drivers and two receive amplifiers. It is designed to drive $45V_{P-P}$ signals at 2MHz into a 200Ω load differentially with very low distortion. The receive amplifiers also provide very low distortion and noise, and with external resistors can be wired 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 ±5V to ±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.

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