

Features

- Complete ADSL differential driver and receiver
- 54V_{P-P} output drive into 100Ω differential
- 50V_{P-P} output drive into 50Ω differential
- Driver 2nd/3rd harmonics of -70dBc/-75dBc at 2V_{P-P} into 100Ω
- Low supply current - 12.5mA per drive amplifier and 5mA per receive amplifier
- Standard surface-mount package

Applications

- ADSL line driver
- HDSL2 line driver
- Video distribution amplifier

Ordering Information

Part No	Package	Tape & Reel	Outline #
EL1502CM	20-Lead SO		MDP0027

General Description

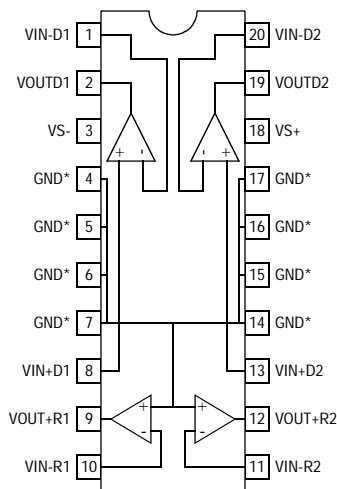
The EL1502C is a complete transceiver solution for high speed data transmission over twisted pair wires. It contains two wideband, high-voltage drivers and two low-noise receive amplifiers. The EL1502C is ideally suited for both ADSL and HDSL2 applications, in which it can supply a 50V_{P-P} signal into a 50Ω differential load while exhibiting very low distortion. The receive amplifiers also have very low distortion and low-noise for superior reception of small signals.

The line drivers of the EL1502C are current-feedback type amplifiers, which achieve a high slew rate while consuming moderate power. They retain their frequency response over a wide range of externally set gains. The receive amplifiers are of the voltage-feedback type and can be used to implement a hybrid coupler or filter functions using external passive components.

The EL1502C operates on ±5V to ±15V supplies. It retains its bandwidth and linearity over the complete supply range.

The device is supplied in a standard form factor, 20-pin SOIC package. The eight center package pins of the package are used as ground connections and heat spreaders, allowing for operation over the full -40°C to +85°C temperature range.

Connection Diagrams



20-Pin Wide Body SOIC

* Gnd pins are heat spreaders

EL1502C - Product Brief

High Power Differential Line Driver/Receiver

General Disclaimer

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HIGH PERFORMANCE ANALOG INTEGRATED CIRCUITS

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