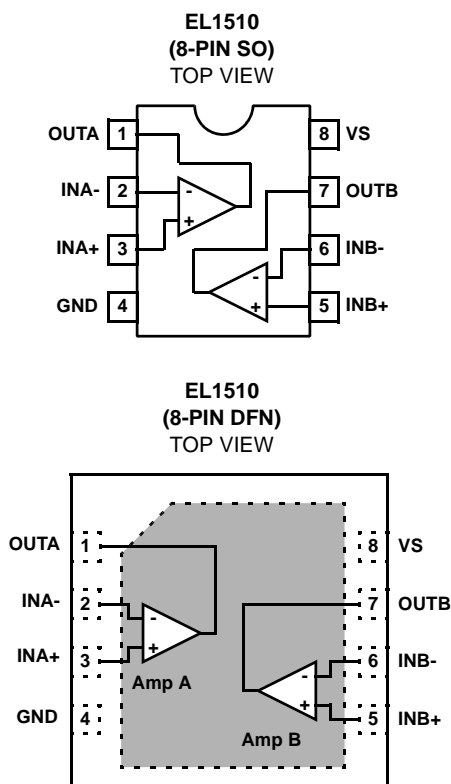


Medium Power Differential Line Driver

The EL1510 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 $\pm 12\text{V}$ supplies. This driver achieves a typical distortion of less than -85dBc, at 150kHz into a 25Ω load. The EL1510 is available in the power 8-pin DFN package and is specified for operation over the full -40°C to $+85^\circ\text{C}$ temperature range. The DFN 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 EL1510 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 EL1510 is ideal for CPE modem applications in ADSL, HDSL2, G.SHDSL, and VDSL.

Pinouts



Features

- $40\text{V}_{\text{P-P}}$ differential output drive into 100Ω
- -85dBc typical driver output distortion at full output at 150kHz
- Low quiescent current of 7.5mA per amplifier
- Pb-free available (RoHS compliant)

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 NUMBER	PACKAGE	TAPE & REEL	PKG. DWG. #
EL1510CS	8-Pin SO	-	MDP0027
EL1510CS-T7	8-Pin SO	7"	MDP0027
EL1510CS-T13	8-Pin SO	13"	MDP0027
EL1510CSZ (See Note)	8-Pin SO (Pb-Free)	-	MDP0027
EL1510CSZ-T7 (See Note)	8-Pin SO (Pb-Free)	7"	MDP0027
EL1510CSZ-T13 (See Note)	8-Pin SO (Pb-Free)	13"	MDP0027
EL1510CL	8-Pin DFN	-	MDP0047
EL1510CL-T7	8-Pin DFN	7"	MDP0047
EL1510CL-T13	8-Pin DFN	13"	MDP0047

NOTE: Intersil Pb-free products employ special Pb-free material sets; molding compounds/die attach materials and 100% matte tin plate termination finish, which are RoHS compliant and compatible with both SnPb and Pb-free soldering operations. Intersil Pb-free products are MSL classified at Pb-free peak reflow temperatures that meet or exceed the Pb-free requirements of IPC/JEDEC J STD-020C.

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