

Dual Channel Medium Power Differential Line Driver

The EL1527 is a very low power dual channel differentiated amplifier designed for central office and customer premise line driving for DMT ADSL solutions. This device features a high drive capability of 400mA while consuming only 7.5mA of supply current per amplifier from $\pm 12V$ supplies. This driver achieves a typical distortion of less than -75dBc, at 1MHz into a 50 Ω load.

The EL1527 has two control pins, C₀ and C₁, per channel. With the selection of C₀ and C₁, the device can be set into full-I_S power, 3/4-I_S power, 1/2-I_S power, and power-down disable modes. The EL1527 maintains excellent distortion and load driving capabilities even in the lowest power settings.

The EL1527 is available in the thermally-enhanced 28 Ld HTSSOP package. This device is specified for operation over the full -40°C to +85°C temperature range.

Ordering Information

PART NUMBER	PART MARKING	TEMP. RANGE (°C)	PACKAGE	PKG. DWG. #
EL1527CRE	1527CRE	-40 to +85	28 Ld HTSSOP	MDP0048
EL1527CRE-T7*	1527CRE	-40 to +85	28 Ld HTSSOP	MDP0048
EL1527CRE-T13*	1527CRE	-40 to +85	28 Ld HTSSOP	MDP0048
EL1527CREZ (See Note)	1527CREZ	-40 to +85	28 Ld HTSSOP (Pb-Free)	MDP0048
EL1527CREZ-T7* (See Note)	1527CREZ	-40 to +85	28 Ld HTSSOP (Pb-Free)	MDP0048
EL1527CREZ-T13 (See Note)	1527CREZ	-40 to +85	28 Ld HTSSOP (Pb-Free)	MDP0048

*Please refer to TB347 for details on reel specifications.

NOTE: These Intersil Pb-free plastic packaged products employ special Pb-free material sets, molding compounds/die attach materials, and 100% matte tin plate plus anneal (e3 termination finish, which is 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-020.

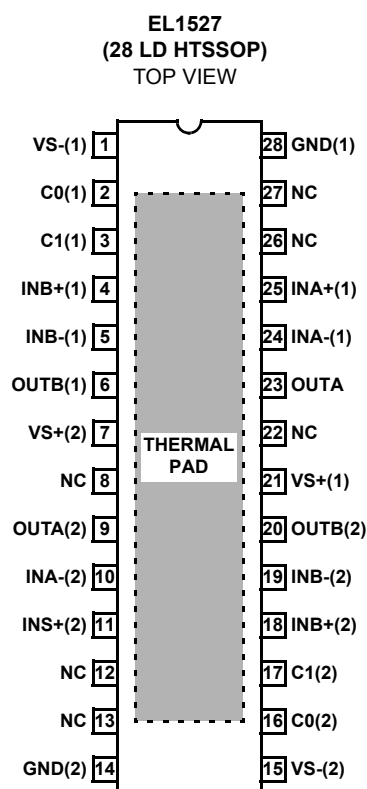
Features

- Drives 360mA at 16V_{P-P} on $\pm 12V$ supplies
- 40V_{P-P} differential output drive into 100 Ω
- -75dBc typical driver output distortion driving 50 Ω at 1MHz and 1/2-I_S bias current
- Low quiescent current of 3.5mA per amplifier in 1/2-I_S mode
- Power-down disable mode
- Pb-free available (RoHS compliant)

Applications

- ADSL G.DMT and G.lite CO line driving
- G.SHDSL, HDSL2 line driver
- ADSL CPE line driving
- Video distribution amplifier
- Video twisted-pair line driver

Pinout



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