EL1527



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Dual Channel Medium Power Differential Line Driver

intercil

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 ±12V supplies. This driver achieves a typical distortion of less than -75dBc, at 1MHz into a 50Ω load.

The EL1527 has two control pins, C₀ and C₁, per channel. With the selection of C_0 and C_1 , 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

Features

- Drives 360mA at 16V_{P-P} on ±12V supplies
- 40V_{P-P} differential output drive into 100Ω
- -75dBc typical driver output distortion driving 50Ω at 1MHz and 1/2-IS bias current

18 INB+(2)

17 C1(2) 16 C0(2)

15 VS-(2)

- 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

| | | TEMP. | | | i mout | | | |
|--|-----------------|---------------|---------------------------|----------------|--------|------------------------|----------------------|--------------------------|
| PART NUMBER | PART MARKING | RANGE (°C) | PACKAGE | PKG. DWG. # | om/ | Inte | EL1527 BLD HTSSOF |) |
| EL1527CRE | 1527CRE | -40 to +85 | 28 Ld HTSSOP | MDP0048 | | _ | | _ |
| EL1527CRE-T7* | 1527CRE | -40 to +85 | 28 Ld HTSSOP | MDP0048 | | VS-(1) 1 | U | 28 GND(1) |
| EL1527CRE-T13* | 1527CRE | -40 to +85 | 28 Ld HTSSOP | MDP0048 | | C0(1) 2 | | 27 NC |
| EL1527CREZ (See Note) | 1527CREZ | -40 to +85 | 28 Ld HTSSOP (Pb-Free) | MDP0048 | | C1(1)3 | | 26 NC |
| EL1527CREZ-T7* (See Note) | 1527CREZ | -40 to +85 | 28 Ld HTSSOP (Pb-Free) | MDP0048 | | INB+(1) 4 INB-(1) 5 | | 25 INA+(1) 24 INA-(1) |
| EL1527CREZ-T13 (See Note) | 1527CREZ | -40 to +85 | 28 Ld HTSSOP (Pb-Free) | MDP0048 | | OUTB(1) 6 | | 23 OUTA |
| *Please refer to TB347 for details on reel specifications. | | | | | - | VS+(2) 7 | THERMAL | 22 NC |
| NOTE: These Intersil Pb-free plastic packaged products employ special Pb-free material sets, molding compounds/die attach materials, and 100% | | | | | | NC 8 | PAD | 21 VS+(1) |
| matte tin plate plus anneal (e3 termination finish, which is RoHS compliant and compatible with both SnPb and Pb-free soldering operations). Intersil | | | | | | OUTA(2) 9 | | 20 OUTB(2) |
| 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. | | | | | | INA-(2) <u>10</u> | | 19 INB-(2) |



INS+(2) 11 NC 12

NC 13 GND(2) 14

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