LT1497
Dual 125mA, 50MHz Current Feedback Amplifier

FEATURES

- **Minimum Output Current: ±125mA**
- **Maximum Supply Current per Amp: 7mA, V_S = ±5V**
- **Gain-Bandwidth: 50MHz, V_S = ±15V**
- Slew Rate: 900V/µs, V_S = ±15V
- Wide Supply Range: V_S = ±2.5V to ±15V (Enhanced θ_{JA} 16-Pin SO Package)
- Enhanced θ_{JA} SO-8 Package for ±5V Operation
- 0.02% Differential Gain: A_V = 2, R_L = 150Ω
- 0.015° Differential Phase: A_V = 2, R_L = 150Ω
- ±13V Output Swing: I_L = 100mA, V_S = ±15V
- ±3.1V Output Swing: I_L = 100mA, V_S = ±5V
- 60ns Settling Time to 0.1%, 10V Step
- Thermal Shutdown Protection

APPLICATIONS

- Twisted-Pair Drivers
- Video Amplifiers
- Cable Drivers
- Test Equipment Amplifiers
- Buffers

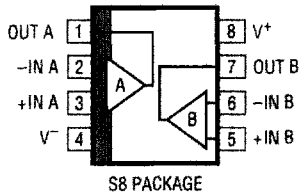
DESCRIPTION

The LT®1497 dual current feedback amplifier features low power, high output drive, excellent video characteristics and outstanding distortion performance. From a low 7mA maximum supply current per amplifier, the LT1497 drives ±100mA with only 1.9V of headroom. Twisted pairs can be driven differentially with –70dBc distortion up to 1MHz for ±40mA peak signals.

The LT1497 is available in a low thermal resistance 16-pin SO package for operation with supplies up to ±15V. For ±5V operation the device is also available in a low thermal resistance SO-8 package. The device has thermal and current limit circuits that protect against fault conditions.

The LT1497 is manufactured on Linear Technology's complementary bipolar process. The device has characteristics that bridge the performance between the LT1229 and LT1207 dual current feedback amplifiers. The LT1229 has 30mA output drive, 100MHz bandwidth and 12mA supply current. The LT1207 has 250mA output drive, 60MHz bandwidth and 40mA supply current.

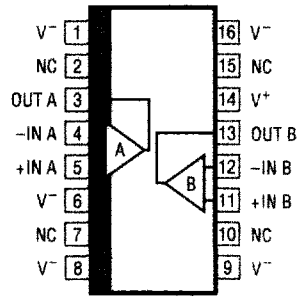
TOP VIEW



S8 PACKAGE
8-LEAD PLASTIC SO

LT1497CS8

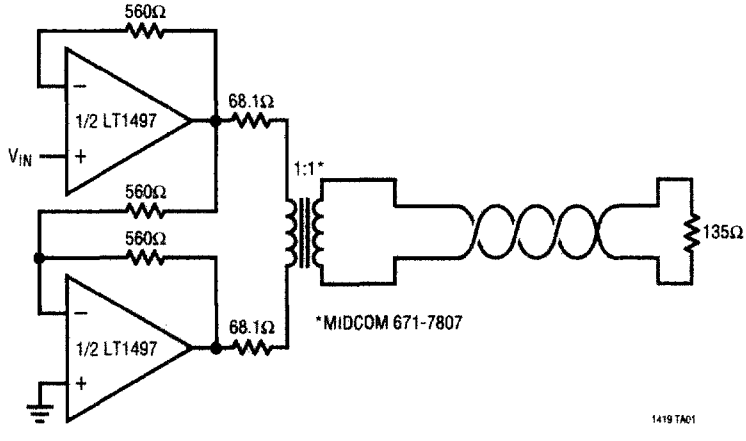
TOP VIEW



S PACKAGE
16-LEAD PLASTIC SO

LT1497CS

HDSL Line Driver



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