HARRIS SEMICONDUCTOR

HA-2850

470MHz, Low Power, High Slew Rate Operational Amplifier

November 1996

Features

- Low Supply Current 7.5mA
- High Slew Rate 340V/µs
- Open Loop Gain 25kV/V
- Wide Gain-Bandwidth ($A_V \geq 10$) 470MHz
- Full Power Bandwidth 5.4MHz
- Low Offset Voltage 0.6mV
- Input Noise Voltage . . . . . 11nV/$\sqrt{Hz}$
- Differential Gain/Phase . . . . . 0.04%/0.04 Degrees
- Lower Power Enhanced Replacement for AD840 and EL2040

Applications

- Pulse and Video Amplifiers
- Wideband Amplifiers
- High Speed Sample-Hold Circuits
- Fast, Precise D/A Converters

Description

The HA-2850 is a wideband, high slew rate, operational amplifier featuring superior speed and bandwidth characteristics. Bipolar construction, coupled with dielectric isolation, delivers outstanding performance in circuits with a closed loop gain of 10 or greater.

A 340V/µs slew rate and a 470MHz gain bandwidth product ensure high performance in video and wideband amplifier designs. Differential gain and phase are a low 0.04% and 0.04 degrees respectively, making the HA-2850 ideal for video applications. A full ±10V output swing, high open loop gain, and outstanding AC parameters, make the HA-2850 an excellent choice for high speed Data Acquisition Systems.

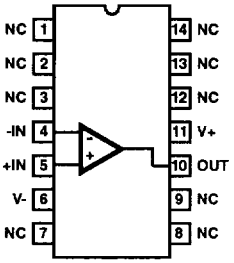
The HA-2850 is available in commercial and industrial temperature ranges, and a choice of packages. For military grade product, refer to the HA-2850/883 data sheet Harris AnswerFAX (407-724-7800) Document #3595.

Ordering Information

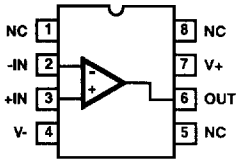
PART NUMBER (BRAND)	TEMP. RANGE (°C)	PACKAGE	PKG. NO.
HA3B2850-5	0 to 75	14 Ld PDIP	E14.3
HA3-2850-5	0 to 75	8 Ld PDIP	E8.3
HA9P2850-5 (H28505)	0 to 75	8 Ld SOIC	M8.15
HA3B2850-9	-40 to 85	14 Ld PDIP	E14.3
HA3-2850-9	-40 to 85	8 Ld PDIP	E8.3

Pinouts

HA-2850 (PDIP) TOP VIEW



HA-2850 (PDIP, SOIC) TOP VIEW



NOTE: No Connection (NC) pins may be tied to a ground plane for better isolation and heat dissipation.

CAUTION: These devices are sensitive to electrostatic discharge. Users should follow proper IC Handling Procedures.

File Number **2844.3**