

Complete Data Sheet available via web, Harris' home page: <http://www.semi.harris.com> or via Harris AnswerFAX, see Section 17

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## High Frequency/Video Switch

### Features

- Wideband Operation ..... 200MHz
- Differential Gain ..... 0.03%
- Differential Phase ..... 0.003 Degrees
- Switching Speed ..... 100ns
- $r_{ON}$  ..... .35 $\Omega$
- Off Isolation at 10MHz ..... -65dB
- Crosstalk at 10MHz ..... -80dB

### Applications

- Routing Switchers
- Production Mixers
- High Definition TV
- Radar Signal Conditioning
- Medical Imaging
- Heads-Up Displays
- Simulators
- Sonar

### Related Literature

- HI-222/883 Data Sheet In 1989 Military Analog Data Book

### Description

The HI-222 is a high frequency analog switch that complements the Harris family of high speed op amps and buffers. Fabricated with our Dielectric Isolation process and using silicon gate technology, many key parameters have been enhanced.

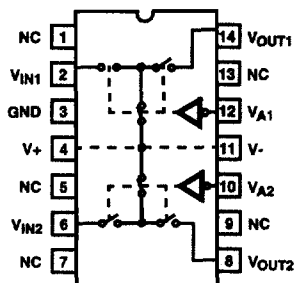
Crosstalk and off isolation are optimized with a T-switch configuration and the use of nonconnected pins for extended shielding. Other features of the HI-222 include wideband operation, low  $r_{ON}$ , fast switching speeds and low differential gain and phase. The characteristics of this TTL compatible device make it ideal for designs where improved switching performance is required.

The primary application of this dual SPST switch is the routing of high frequency signals in equipment ranging from video production mixers to military RF circuits.

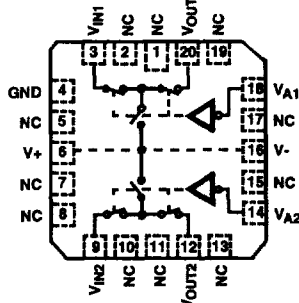
For specifications on HI-222/883, refer to Harris Military Analog Data book.

### Pinouts

HI-222 (CERDIP, PDIP) (LOGIC "1" INPUT) TOP VIEW



HI-222 (CLCC/PLCC) (LOGIC "0" INPUT) TOP VIEW



NOTE: Source and Drain are arbitrarily depicted as Analog Input and Output, respectively. They may be interchanged without affecting performance. All nonconnected pins should be tied to ground.

### Ordering Information

PART NUMBER	TEMP. RANGE (°C)	PACKAGE	PKG. NO.
HI4P0222-5	0 to 75	20 Ld PLCC	N20.35
HI1-0222-5	0 to 75	14 Ld CERDIP	F14.3
HI3-0222-5	0 to 75	14 Ld PDIP	E14.3
HI1-0222/883	-55 to 125	14 Ld CERDIP	F14.3
HI4-0222/883	-55 to 125	20 Ld CLCC	J20.A

### Functional Diagram

