

DUAL SCHMITT-TRIGGER

7413
276-1815

GENERAL DESCRIPTION

The 7413 is a dual Schmitt-trigger with input gating. It differs from a conventional dual 4-input gate in that instead of having a single threshold voltage, the 7413 has different thresholds for positive-and negative-going inputs. When the output is in the logical "0" state an input must be lowered to 0.9 volts typically before the output changes state. Conversely in order to return to the logical "0" state the input must rise to 1.7V typically. This hysteresis is extremely beneficial in applications where slow rise and fall time signals are prevalent.

FEATURES

- 800 mV hysteresis typ.—higher noise immunity
- Operation from very slow ramp voltages
- Temperature compensated design
- Typical propagation delay—17 ns
- Typical power dissipation 42 mW per function

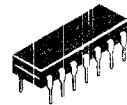
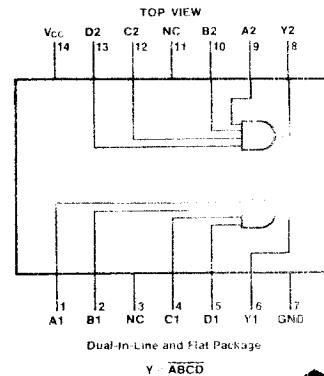
APPLICATIONS

- Pulse shaper
- Threshold detector

ABSOLUTE MAXIMUM RATINGS

Supply Voltage.....	5.25V
Input Voltage.....	5.5V
Output Voltage.....	5.5V
Operating Temperature Range.....	0°C to +70°C
Storage Temperature Range.....	-65°C to +150°C
Lead Temperature (Soldering, 10 sec).....	300°C

PIN CONNECTION



DUAL FOUR-INPUT NAND GATE

7420
276-1809

GENERAL DESCRIPTION

Employing TTL (Transistor-Transistor-Logic) to achieve high speed at moderate power dissipation, these gates provide the basic functions used in the implementation of digital integrated circuit systems. Characteristics of the circuits include high noise immunity, low output impedance, good capacitive drive capability, and minimal variation in switching times with temperature.

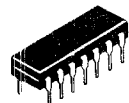
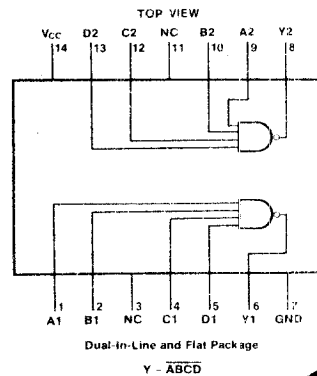
FEATURES

- Typical Noise Immunity 1V
- Fan Out 10
- Guaranteed Noise Immunity 400 mV
- Average Propagation Delay 13 ns
- Average Power Dissipation 10 mW per gate

ABSOLUTE MAXIMUM RATINGS

V _{CC}	5.25V
Input Voltage.....	5.5V
Storage Temperature Range.....	-65°C to +150°C
Fan-Out.....	10
Lead Temperature (Soldering, 10 sec).....	300°C
Supply Voltage (V _{CC}).....	4.75—5.25V
Temperature (T _A).....	0°C to 70°C

PIN CONNECTION



TRIPLE THREE-INPUT NOR GATE

7427
276-1823

GENERAL DESCRIPTION

The NOR gate described here is designed to provide additional versatility to the line of 74 functions.

The 7427 has neither expandable inputs nor Strobe.

ABSOLUTE MAXIMUM RATINGS

Supply Voltage.....	5.25V
Input Voltage.....	5.5V
Output Voltage.....	5.5V
Storage Temperature Range.....	-65°C to +150°C
Lead Temperature (Soldering, 10 seconds).....	300°C
Supply Voltage (V _{CC}).....	4.75—5.25V
Temperature (T _A).....	0°C to 70°C

PIN CONNECTION

