

10102B,F: -30 to +85°C

DIGITAL 10,000 SERIES ECL

## DESCRIPTION

The 10102 is a high speed quad 2-input NOR gate. All inputs are terminated with a 50 kΩ resistor to V<sub>EE</sub> which eliminates the need to tie unused inputs low. The gate has an excellent speed-power product of 50 picojoules. The 10102 is optimized for high performance logic applications. This gate meets the ECL 10,000 Series standard voltage current and rise and fall time specifications.

## FEATURES

- FAST PROPAGATION DELAY = 2.0 ns TYP
- LOW POWER DISSIPATION = 100 mW/PACKAGE (NO LOAD)
- HIGH FANOUT CAPABILITY  
– CAN DRIVE 50 Ω LINES
- HIGH Z INPUTS – INTERNAL 50 kΩ PULLDOWNS
- HIGH IMMUNITY FROM POWER SUPPLY VARIATIONS: V<sub>EE</sub> = -5.2 V ±5% RECOMMENDED
- OPEN EMITTER LOGIC AND BUSSING CAPABILITY

## TEMPERATURE RANGE

- -30 to +85°C Operating Ambient

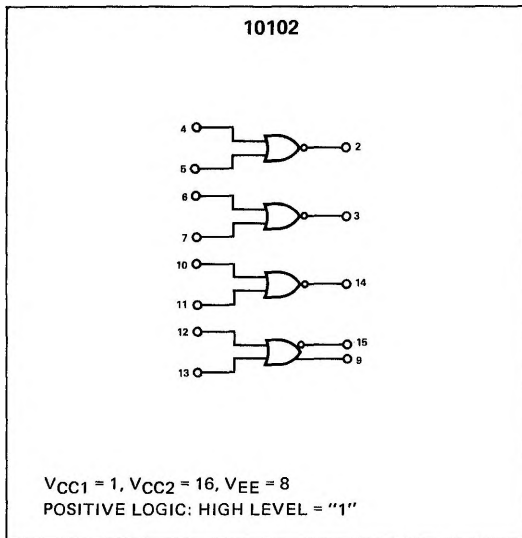
## PACKAGE TYPE

B: 16-Pin Silicone DIP

F: 16-Pin CERDIP

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## LOGIC DIAGRAM



## CIRCUIT SCHEMATIC

