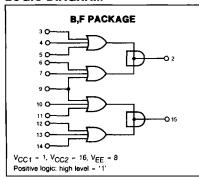
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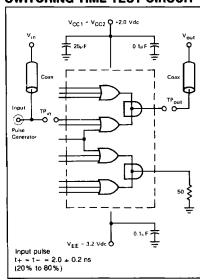
LOGIC DIAGRAM



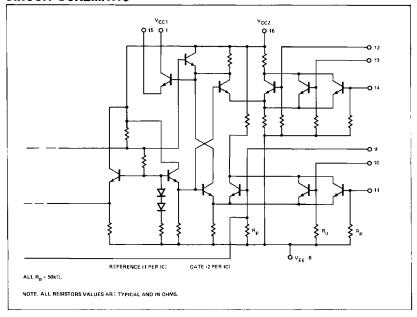
FEATURES

- · Fast propagation delay for 2 logic levels = 2.3 ns TYP
- · Low power dissipation = 100mW/package TYP (no load)
- · High fanout capability can drive 50Ω line
- High Z inputs internal 50k Ω pulldowns
- · High immunity from power supply variations: $V_{CC} = -5.2V \pm 5\%$ recommended
- Open emitter logic and bussing capability

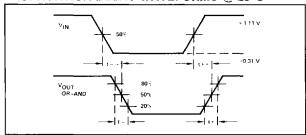
SWITCHING TIME TEST CIRCUIT



CIRCUIT SCHEMATIC



PROPAGATION DELAY WAVEFORMS @ 25°C



NOTES:

- 1. Each ECL 10,000 series device has been designed to meet the DC specifications shown in the test table, after thermal equilibrium has been established. The circuit is in a test socket or mounted on a printed circuit board and transverse air flow greater than 500 linear fpm is maintained. Voltage levels will shift approximately 4 mV with an air flow of 200 linear fpm. Outputs are terminated through a 50-ohm resistor to 2.0 volts.

 For AC tests, all input and output cables to the scope are equal lengths of 50-ohm coaxial.
- cable. Wire length should be < \(^{\text{ls}}\) inch from TP_{in} to input pin and TP_{out} to output pin. A 50-ohm termination to ground is located in each scope input. Unused outputs are connected to a 50-ohm resistor to ground.
- 3. Test procedures are shown for only one input or set of input conditions. Other inputs are
- tested in the same manner.

 All voltage measurements are referenced to the ground terminal. Terminals not specifically referenced are left electrically open

