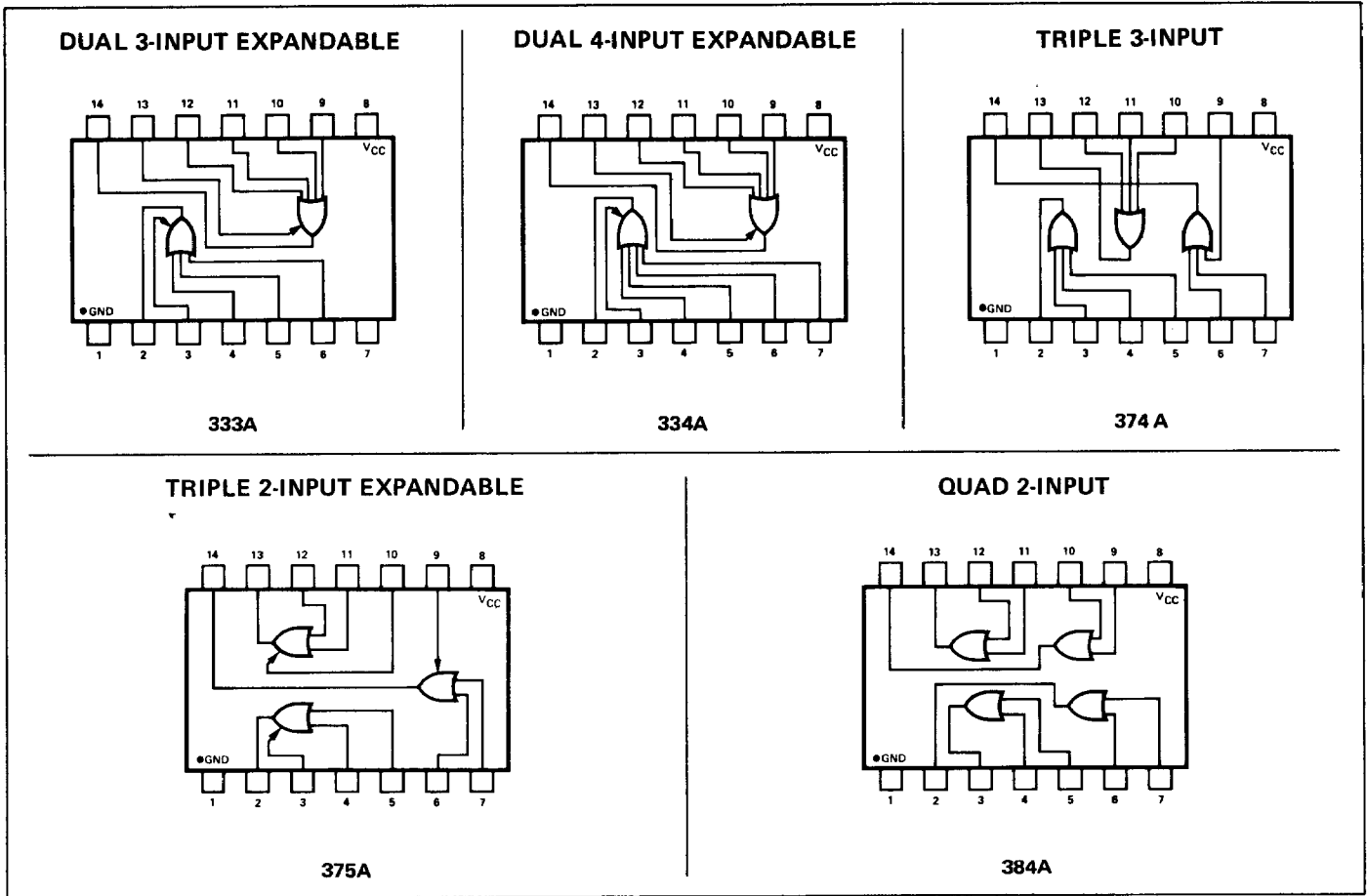


OR GATES

- SP333A** Dual 3-Input Expandable
- SP334A** Dual 4-Input Expandable
- SP374A** Triple 3-Input
- SP375A** Triple 2-Input
- SP384A** Quad 2-Input

PIN CONFIGURATIONS



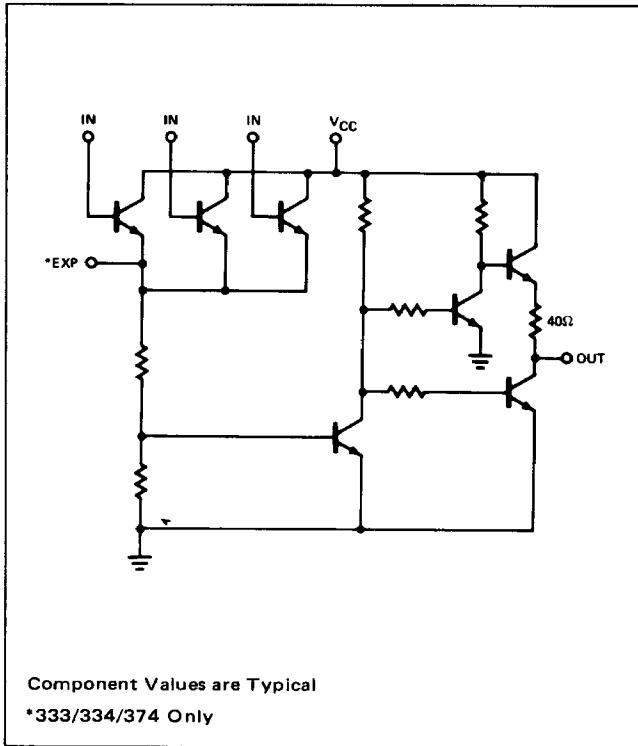
ELECTRICAL CHARACTERISTICS (Notes 1, 2, 3, 5 and 7)

Standard Conditions: $V_{CC} = 5.0V$, $T_A =$ Operating Temp. Range (Unless Noted)

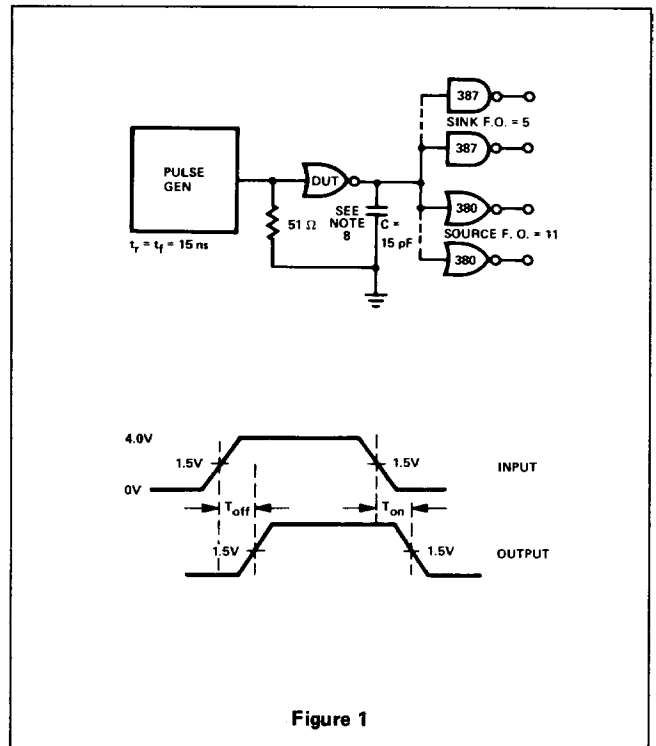
CHARACTERISTIC	TEST CONDITIONS	MIN.	TYP	MAX.	UNITS
Noise Immunity for "1" for "0"	See Note 6 See Note 6	1100 600	1700 1000		
Output Voltage "1" Level "0" Level	$I_{out} = -2mA, V_{in} = 2.7V$ $I_{out} = 12.5mA, V_{in} = 1.2V$ $I_{out} = 7.5mA, V_{in} = 1.2V$	3.8		0.6 0.4	V V V
Input Current - input high	$V_{in} = 2.7V$			180	μA
Power Supply Current output high output low	$V_{in} = 4.0V, T_A = 25^\circ C$ $V_{in} = 0V, T_A = 25^\circ C$		11.0 11.2	14.7 15.2	mA/gate mA/gate
Turn on Delay	See Test Figure 1, $T_A = 25^\circ C$		50	80	ns
Turn off Delay	See Test Figure 1, $T_A = 25^\circ C$		40	70	ns
Fan-out -To sink loads (2.5mA/load) -To source loads (180 μA /load)				5 11	
Expander Voltage (333/334/335 only)	$V_{in} = 2.7V$	1.85			V

Typical Values are for $T_A = 25^\circ C$. See Page 3 for Notes.

SCHEMATIC DIAGRAM



TEST CIRCUIT AND WAVEFORM



The following curves are normalized, when applicable, to the standard data sheet conditions.

