Signetics

8-INPUT POSITIVE NAND GATE
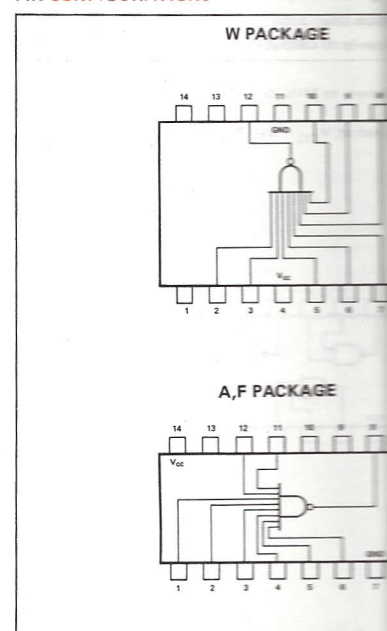
SCHEMATIC DIAGRAM

NOTE: Component values shown are nominal.
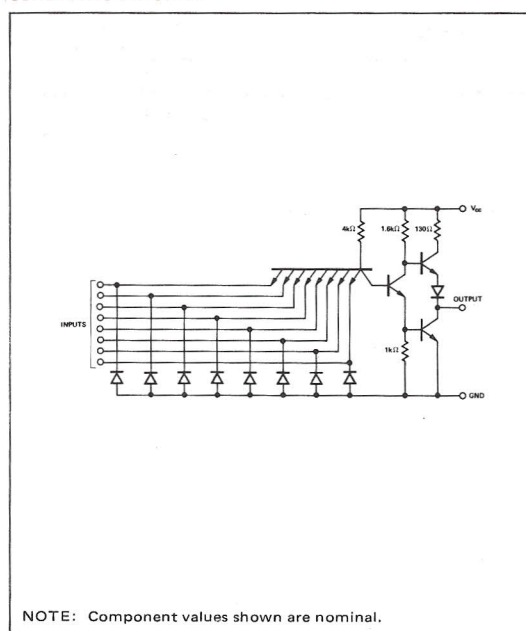
PIN CONFIGURATIONS

W PACKAGE

A,F PACKAGE

RECOMMENDED OPERATING CONDITIONS

PARAMETER	MIN	NOM	MAX
Supply Voltage V_{CC}: S5430 Circuits	4.5	5	5.
N7430 Circuits	4.75	5	5.25
Normalized Fan-Out from Output, N			1
Operating Free-Air Temperature Range, T_A: S5430 Circuits	-55	25	125
N7430 Circuits	0	25	70

ELECTRICAL CHARACTERISTICS (over recommended operating free-air temperature range unless otherwise noted)

	PARAMETER	TEST CONDITIONS *		MIN	TYP**
$V_{in(1)}$	Logical 1 input voltage required at all input terminals to ensure logical 0 level at output	V_{CC} = MIN		2	
$V_{in(0)}$	Logical 0 input voltage required at any input terminal to ensure logical 1 level at output	V_{CC} = MIN			
$V_{out(1)}$	Logical 1 output voltage	V_{CC} = MIN, I_{load} = -400μA	V_{in} = 0.8V,	2.4	3.3
$V_{out(0)}$	Logical 0 output voltage	V_{CC} = MIN, I_{sink} = 16mA	V_{in} = 2V,		0.22
$I_{in(0)}$	Logical 0 level input current (each input)	V_{CC} = MAX,	V_{in} = 0.4V		
$I_{in(1)}$	Logical 1 level input current (each input)	V_{CC} = MAX, V_{CC} = MAX,	V_{in} = 2.4V V_{in} = 5.5V		
I_{OS}	Short circuit output current †	V_{CC} = MAX,	S5430	-20	
			N7430	-18	