

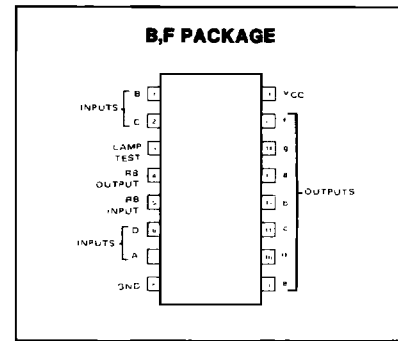
SPEED/PACKAGE AVAILABILITY

54 F 74 B,F

SWITCHING CHARACTERISTICS $V_{CC} = 5V, T_A = 25^\circ C$

TEST CONDITIONS			54/74			UNIT
			$C_L = 15pF$ (54) $R_L = 1k\Omega$ (74) $R_L = 667\Omega$			
PARAMETER	FROM INPUT	TO OUTPUT	MIN	TYP	MAX	UNIT
Propagation delay time						
t_{PLH} Low-to-high	A,RBI	Any			100	ns
t_{PHL} High-to-low					100	ns

PIN CONFIGURATION



Load circuit and typical waveforms are shown at the front of section.

TRUTH TABLE

FUNCTION	INPUTS						BI/RBO	OUTPUTS							NOTE
	LT	RBI	D	C	B	A		a	b	c	d	e	f	g	
0	1	1	0	0	0	0	1	1	1	1	1	1	1	0	1
1	1	x	0	0	0	1	1	0	1	1	0	0	0	0	1
2	1	x	0	0	1	0	1	1	1	0	1	1	0	1	1
3	1	x	0	0	1	1	1	1	1	1	1	0	0	1	1
4	1	x	0	1	0	0	1	1	0	1	1	0	0	1	1
5	1	x	0	1	0	1	1	1	0	1	1	0	1	1	1
6	1	x	0	1	1	0	1	1	0	0	1	1	1	1	1
7	1	x	0	1	1	1	1	1	1	1	1	0	0	0	0
8	1	x	1	0	0	0	1	1	1	1	1	1	1	1	1
9	1	x	1	0	0	1	1	1	1	1	0	0	1	1	1
10	1	x	1	0	1	0	1	1	0	0	0	1	1	0	1
11	1	x	1	0	1	1	1	1	0	0	1	1	0	0	1
12	1	x	1	1	0	0	1	1	0	1	0	0	0	1	1
13	1	x	1	1	0	1	1	1	1	0	0	1	0	1	1
14	1	x	1	1	1	0	1	1	0	0	0	1	1	1	1
15	1	x	1	1	1	1	1	1	0	0	0	0	0	0	0
BI	x	x	x	x	x	x	0	0	0	0	0	0	0	0	2
RBI	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
LT	0	x	x	x	x	x	1	1	1	1	1	1	1	1	4

NOTES:

- BI/RBO is wire-OR logic serving as blanking input (BI) and/or ripple-blanking output (RBO). The blanking input must be open or held at a logical 1 when output functions 0 through 15 are desired and ripple-blanking input (RBI) must be open or at a logical 1 during the decimal 0 input. X = input may be high or low.
- When a logical 0 is applied to the blanking input (forced condition) all segment outputs go to a logical 1 regardless of the state of any other input condition.
- When ripple-blanking input (RBI) is at a logical 0 and A = B = C = D = logical 0, all segment outputs go to a logical 1 and the ripple-blanking output goes to a logical 0 (response condition).
- When blanking input/ripple-blanking output is open or held at a logical 1, and a logical 0 is applied to lamp-test input, all segment outputs go to a logical 1.

BLOCK DIAGRAM

