TYPES TF4376B, TP4376B
QUAD S-R LATCHES

SEPTEMBER 1975

- Same as TF4043B and TP4043B except with Normal 2-State Totem-Pole Outputs

description

The '4376B is a quadruple S-R latch with normal two-state totem-pole outputs. Each latch has separate active-high set and reset inputs.

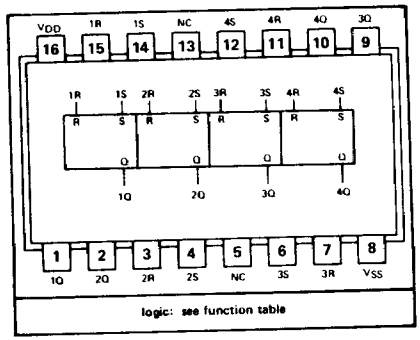
FUNCTION TABLE
(EACH LATCH)

INPUTS		OUTPUT
S	R	Q
L	L	No change
H	L	H
L	H	L
H	H	H*

*This output level is psuedo stable; that is, it may not persist when the S and R inputs return to their inactive (low) level.

See explanation of function tables, pages 16 and 17.

J OR N
DUAL-IN-LINE PACKAGE (TOP VIEW)



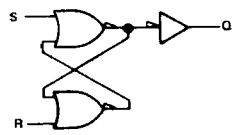
logic: see function table

NC—No internal connection

specifications

MAXIMUM RATINGS	RECOMMENDED OPERATING CONDITIONS	ELECTRICAL CHARACTERISTICS
Page 24	Page 24	Pages 24 and 25, group 2

functional block diagram (each latch)



switching characteristics at 25°C free-air temperature

PARAMETER		TEST CONDITIONS	V_{DD} = 5 V		V_{DD} = 10 V		V_{DD} = 15 V		UNIT
			TYP	MAX	TYP	MAX	TYP	MAX	
t_{PLH}	Propagation delay time, low-to-high-level output	C_L = 50 pF, R_L = 200 kΩ, See Note 1	165		70		60		ns
t_{PHL}	Propagation delay time, high-to-low-level output		165		70		60		ns
t_{TLH}	Transition time, low-to-high-level output		85		30		25		ns
t_{THL}	Transition time, high-to-low-level output		85		30		25		ns
$t_{w(min)}$	Minimum R and S pulse width		80		40		35		ns

NOTE 1: See load circuit and voltage waveforms on page 170.

PRINTED IN U.S.A. 975 975

TEXAS INSTRUMENTS
INCORPORATED
POST OFFICE BOX 5012 • DALLAS, TEXAS 75222