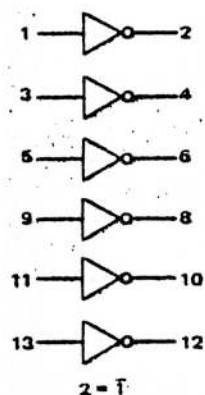
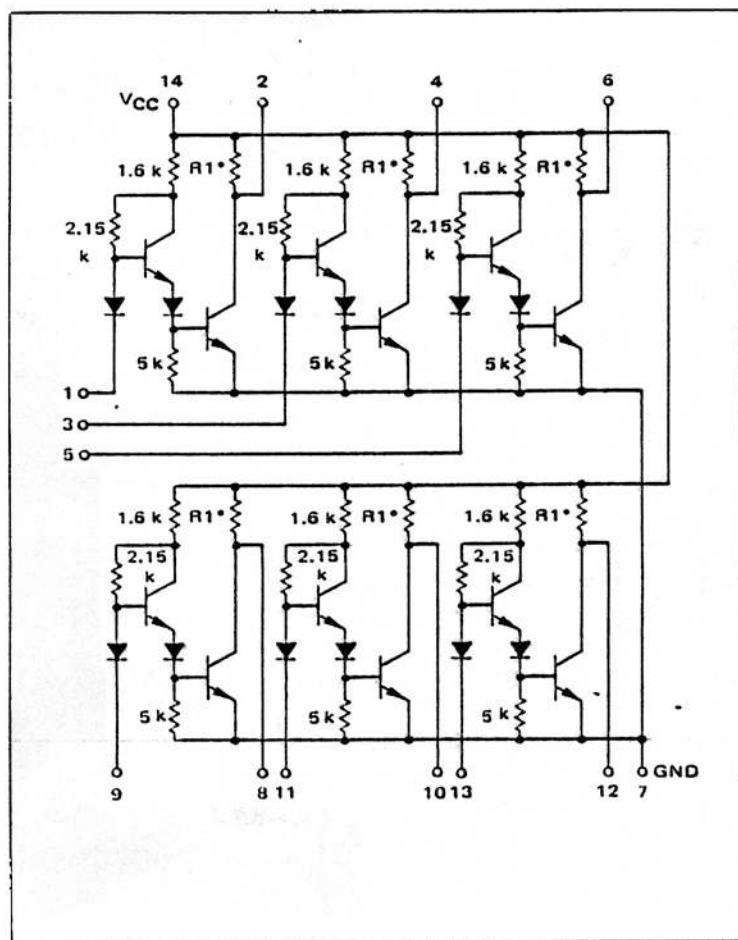


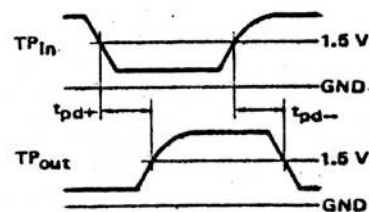
This element consists of six inverter circuits.



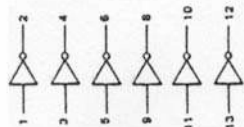
937/ 837 = 26 ns typ

The timing diagram shows a square wave input with a peak voltage of 4.0 V and a low level of 0 V. The pulse width (PW) is 200 ns, the rise time (t_r) is ≤ 10 ns, and the fall time (t_f) is ≤ 10 ns. The circuit schematic shows a two-stage inverter. The input is connected to the first inverter. The output of the first inverter is labeled TP_{in}. The output of the second inverter is labeled TP_{out}. The output of the second inverter is also connected to a node that has a pull-up resistor R to V_{CC} = 5.0 V and a capacitor C to ground. The component is labeled MC833 Or Equivalent.

TEST	R	C
τ_{pd+}	3.9 k ohms	30 pF
τ_{pd-}	400 ohms	50 pF



ELECTRICAL CHARACTERISTICS		TEST CURRENT / VOLTAGE VALUES											
		mA						Volts					
		937		837		637		V _{OL}		V _{OH}		V _{CEX}	
Characteristic	Symbol	Pin Under Test	-55°C	+25°C	+125°C	0°C	+25°C	+75°C	Unit	Min	Max	Min	Max
Output Voltage	V _{OL} V _{OH}	2 2	2.50	2.60	2.50	2.60	2.60	2.50	Vdc	0.45	0.45	0.45	0.50
Short-Circuit Current	I _{SC}	2	-4.00	-4.00	-3.90	-3.90	-3.90	-3.75	mAdc	-	-	-	-
Reverse Current	I _R	1	2.0	2.0	5.0	5.0	5.0	10	μAdc	-	-	-	-
Output Leakage Current	I _{CEX}	2	-	-	50	-	-	-	μAdc	-	-	-	-
Forward Current	I _F	1	-1.60	-1.60	-1.50	-1.40	-1.40	-1.33	mAdc	-	-	-	-
Power Drain Current (Total Device)	I _{PDH} I _{max}	14 14	-	-	32.0	-	-	-	mAdc	-	-	-	-
Switching Times	t _{pd} t _{pd}	1,2 1,2	-	-	15	60	-	-	ns	-	-	-	-
Pin not listed are left open.													



ELECTRICAL CHARACTERISTICS

Test procedures are shown for only one inverter. The other inverters are tested in the same manner.

@ Test Temperature
937 { -55°C
+25°C
+125°C
837 { 0°C
+25°C
+75°C

TEST CURRENT / VOLTAGE APPLIED TO PINS LISTED BELOW:

Characteristic	Symbol	Pin Under Test	-55°C	+25°C	+125°C	0°C	+25°C	+75°C	Unit	Min	Max	Min	Max
Output Voltage	V _{OL} V _{OH}	2 2	2.50	2.60	2.50	2.60	2.60	2.50	Vdc	0.45	0.45	0.45	0.50
Short-Circuit Current	I _{SC}	2	-4.00	-4.00	-3.90	-3.90	-3.90	-3.75	mAdc	-	-	-	-
Reverse Current	I _R	1	2.0	2.0	5.0	5.0	5.0	10	μAdc	-	-	-	-
Output Leakage Current	I _{CEX}	2	-	-	50	-	-	-	μAdc	-	-	-	-
Forward Current	I _F	1	-1.60	-1.60	-1.50	-1.40	-1.40	-1.33	mAdc	-	-	-	-
Power Drain Current (Total Device)	I _{PDH} I _{max}	14 14	-	-	32.0	-	-	-	mAdc	-	-	-	-
Switching Times	t _{pd} t _{pd}	1,2 1,2	-	-	15	60	-	-	ns	-	-	-	-

Pin not listed are left open.

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