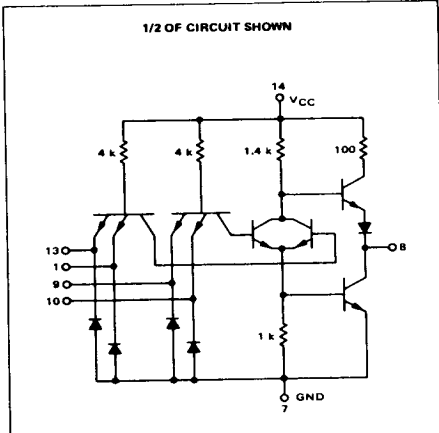


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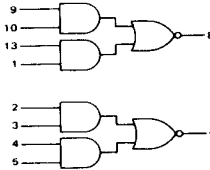
DUAL 2-WIDE 2-INPUT
"AND-OR-INVERT" GATE

MTTL MC7400P series
MTTL MC5400L/7400L series

MC5451L*
MC7451P,L†



This device consists of two AND-OR-INVERT gates. Each gate is made up of two 2-input AND gates ORed together and inverted.



Positive Logic: $B = (9 + 10) + (13 + 1)$

Negative Logic: $B = (9 + 10) + (13 + 1)$

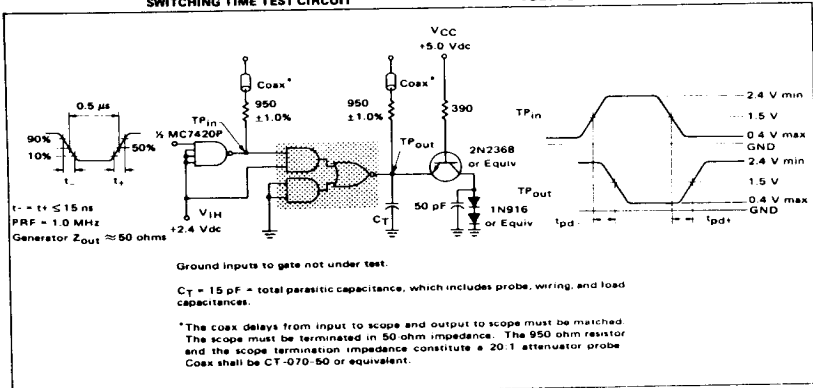
Input Loading Factor = 1
Output Loading Factor = 10

Total Power Dissipation = 28 mW typ/pkg
Propagation Delay Time = 13 ns typ

*L suffix = TO-116 ceramic package (Case 632)
†P suffix = TO-116 plastic package (Case 606)
See General Information section for package outline dimensions.

SWITCHING TIME TEST CIRCUIT

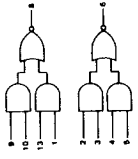
VOLTAGE WAVEFORMS AND DEFINITIONS



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MC5451L, MC7451P, L (continued)



ELECTRICAL CHARACTERISTICS
 Test procedures are shown for only one gate. The other gate is tested in the same manner. Further, test procedures are shown for only one input of the gate under test. To complete testing, sequence through remaining inputs.

MC5451
 MC7451

Pin Under Test | MC5451 Test Limits -55 to +125°C | MC7451 Test Limits 0 to +70°C

TEST CURRENT/VOLTAGE VALUES (All Temperatures)												
mA	Volts											
	I _{CC}	I _{OH}	I _{OL}	V _{IN}	V _{IS}	V _{IEN}	V _{EN}	V _{OP}	V _{OL}	V _{OH}	V _{OC}	V _{CC}
												V _{CC}
16	-0.4	0.4	2.4	5.5	4.5	5.0	2.0	0.8	5.0	4.5	5.5	-

TEST CURRENT/VOLTAGE APPLIED TO PINS LISTED BELOW:											
I _{CC}	I _{OH}	I _{OL}	V _{IN}	V _{IS}	V _{IEN}	V _{EN}	V _{OP}	V _{OL}	V _{OH}	V _{OC}	V _{CC}
											V _{CC}
-	-	-	1	-	-	13	-	-	-	-	-
-	-	-	1	-	-	-	-	-	-	-	7*
-	-	-	1	-	-	-	-	-	-	-	7, 9, 10, 13*
-	-	-	1	-	-	1	-	-	-	-	7, 9, 10, 13*
8	-	-	-	-	-	-	-	-	1.15	-	14
8	-	-	-	-	-	-	-	-	-	1	14
8	8	-	-	-	-	13	-	-	-	-	14
-	-	-	8	-	-	-	-	-	-	-	14
-	-	-	-	-	-	-	-	-	-	-	14
-	-	-	-	-	-	-	-	-	-	-	14
14	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-
1, 8	1, 8	-	-	-	-	-	1, 2, 3, 4, 5, 9, 10, 13	-	-	-	14
1, 8	1, 8	-	-	-	-	-	-	-	-	-	14
1, 8	1, 8	-	-	-	-	-	-	-	-	-	14

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** Crown inlets to gates not under test.
 *** Tested only at 25°C.

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