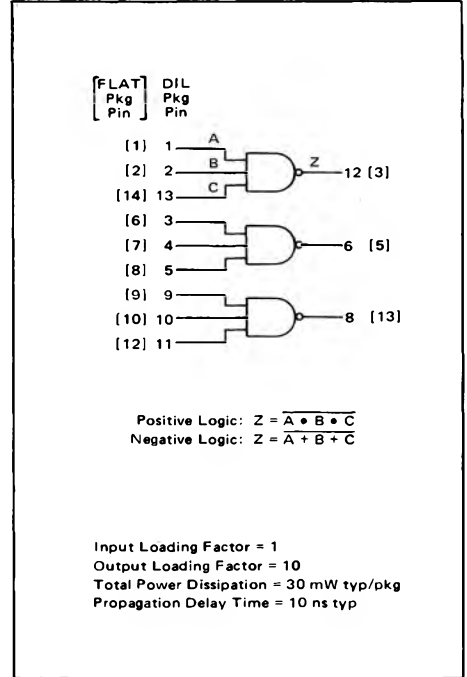
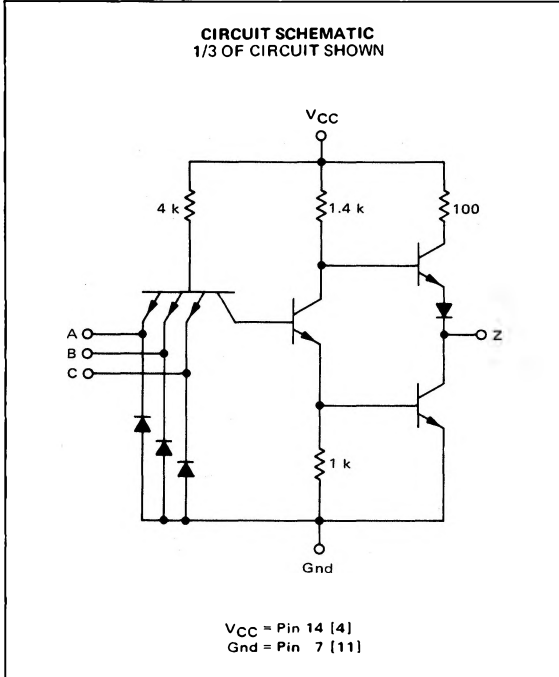


TRIPLE 3-INPUT "NAND" GATE

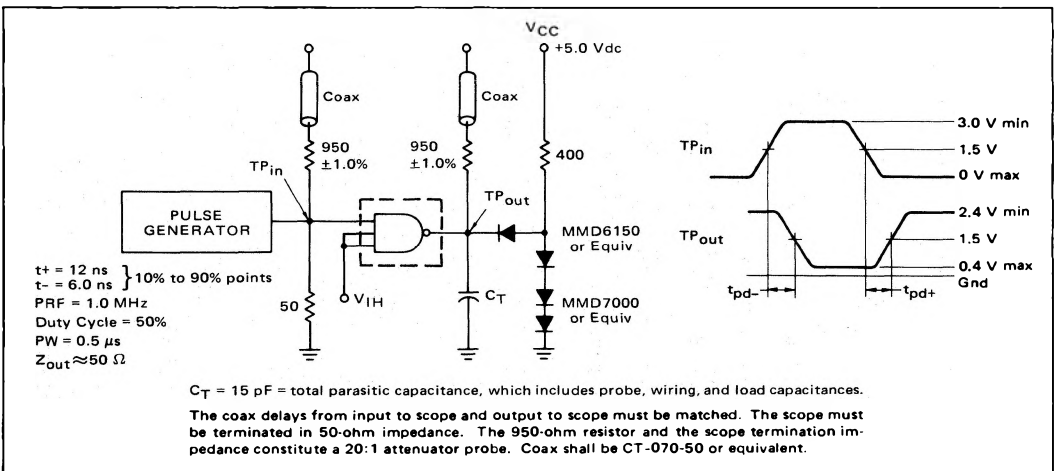
MC5400/7400 series

MC5410 • MC7410

Add Suffix F for TO-86 ceramic package (Case 607).
 Suffix L for TO-116 ceramic package (Case 632).
 Suffix P for TO-116 plastic package (Case 605) MC7410 only.

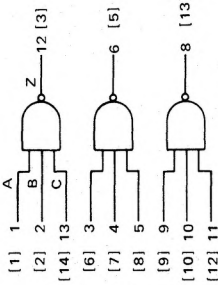


SWITCHING TIME TEST CIRCUIT AND WAVEFORMS



MC5410, MC7410 (continued)

FLAT
Pkg
Pin



V = V_{CC} = Pin 14 [4]
Gnd = Pin 7 [11]

ELECTRICAL CHARACTERISTICS

Test procedures are shown for only one gate. The other gates are 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.

Characteristic	Symbol	Pin Under Test	TEST CURRENT/VOLTAGE VALUES (All Temperatures)										Pin 7[14] is grounded for all tests in addition to the pins listed below:				
			Volts														
			I _{OL}	I _{OH}	V _{IL}	V _{IH}	V _{IHH}	V _{RI}	V _{R2}	V _{h1}	V _{h0}	V _{CC}		V _{CCL}	V _{CCH}		
Input Forward Current	I _F	A	16	-0.4	0.4	2.4	2.4	4.5	4.5	5.0	5.0	0.8	0.8	5.0	4.75	5.25	Gnd
Leakage Current	I _{R1}	A	-	-	-	A	-	-	-	-	-	-	-	-	-	-	B ₁ C*
	I _{R2}	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B ₁ C*
Output Output Voltage	V _{OL}	Z	Z	-	-	-	-	-	-	-	-	-	-	-	-	-	*
	V _{OH}	Z	-	Z	-	-	-	B ₁ C	-	-	-	-	-	-	-	-	*
Short-Circuit Current	I _{SC} †	Z	-20	-55	mAdc	-18	-55	mAdc	-	-	-	-	-	-	-	-	A ₁ B ₁ C*
Power Requirements (Total Device)	I _{PDH}	V	-	16.5	mAdc	-	16.5	mAdc	-	-	-	-	-	-	-	-	-
Power Supply Drain	I _{PDL}	V	-	6.0	mAdc	-	6.0	mAdc	-	-	-	-	-	-	-	-	A ₁ B ₁ C*
Switching Parameters	t _{pd-}	A ₁ Z	-	15**	ns	-	15**	ns	-	-	-	-	-	-	-	-	*
	t _{pd+}	A ₁ Z	-	22**	ns	-	22**	ns	-	-	-	-	-	-	-	-	*

* Ground inputs to gates not under test.

** Tested only at 25°C.

† Only one output should be shorted at a time.