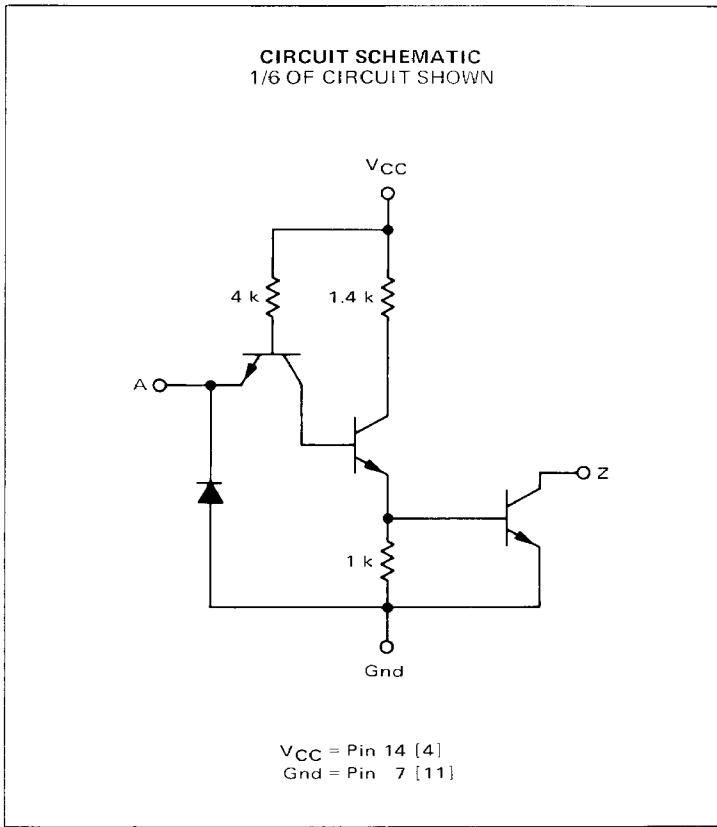


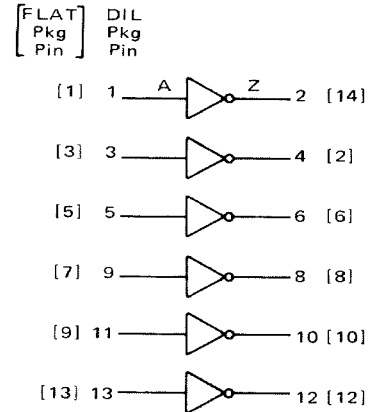


MC5405 • MC7405

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) MC7405 only.

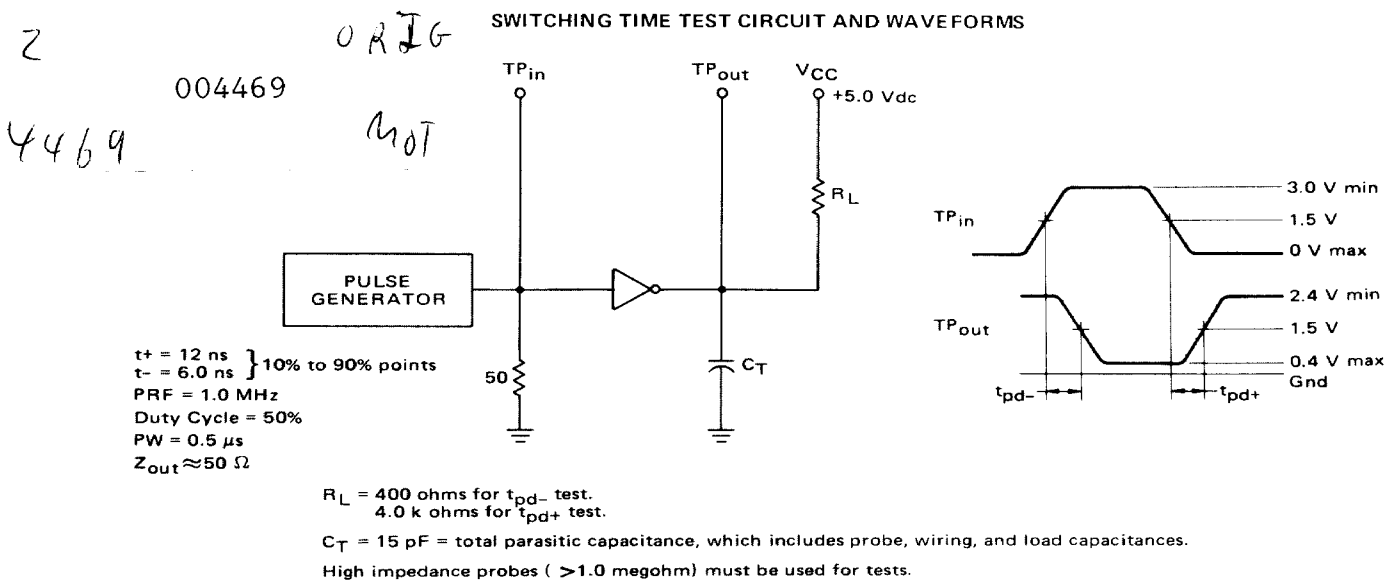


This device consists of six independent inverting gates with no output pullup circuits. It can be used where the Wired-OR function is required, or for driving discrete components.



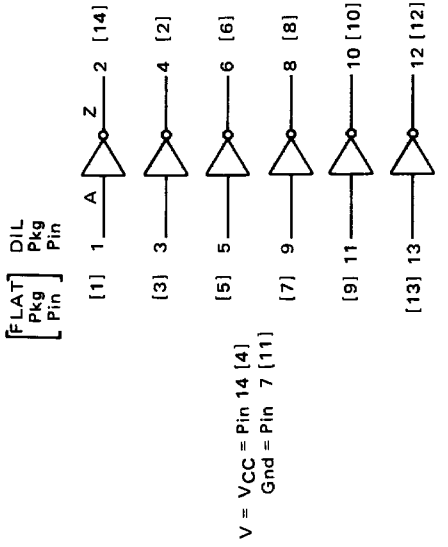
Positive Logic: $Z = \bar{A}$

Input Loading Factor = 1
 Output Loading Factor = 10
 Total Power Dissipation = 60 mW typ/pkg
 Propagation Delay Time = 35 ns typ



ELECTRICAL CHARACTERISTICS

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



Characteristic	Symbol	Pin Under Test	MC5405 Test Limits -55 to +125°C				MC7405 Test Limits 0 to +70°C				TEST CURRENT/VOLTAGE VALUES (All Temperatures)													
			Min	Max	Unit	Min	Max	Unit	Volts															
			<i>I_F</i>	<i>I_{R1}</i>	<i>I_{R2}</i>	<i>V_{OL}</i>	<i>I_{CEX}</i>	<i>I_{PDH}</i>	<i>I_{PDL}</i>	<i>I_{OL}</i>	<i>V_{CEX}</i>	<i>V_{IL}</i>	<i>V_{IH}</i>	<i>V_{IHH}</i>	<i>V_{R1}</i>	<i>V_{R2}</i>	<i>V_{h1}</i>	<i>V_{h0}</i>	<i>V_{CC}</i>	<i>V_{CCL}</i>	<i>V_{CCH}</i>			
Input Forward Current	<i>I_F</i>	A	-	-	1.6	mAdc	-	-	1.6	mAdc	-	-	-	-	-	-	-	-	-	-	-	-	-	
Leakage Current	<i>I_{R1}</i>	A	-	40	µAdc	-	40	µAdc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	<i>I_{R2}</i>	A	-	1.0	mAdc	-	1.0	mAdc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Output Output Voltage	<i>V_{OL}</i>	Z	-	0.4	Vdc	-	0.4	Vdc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Output Leakage Current	<i>I_{CEX}</i>	Z	0.25	-	mAdc	0.25	-	mAdc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Power Requirements (Total Device) Power Supply Drain	<i>I_{PDH}</i>	V	-	33**	mAdc	-	33**	mAdc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<i>I_{PDL}</i>	V	-	12**	mAdc	-	12**	mAdc	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Switching Parameters Turn-On Delay	<i>t_{pd-}</i>	A,Z	-	15**	ns	-	15**	ns	-	-	-	-	-	-	-	-	-	V	-	-	-	-	-	-
	<i>t_{pd+}</i>	A,Z	-	55**	ns	-	55**	ns	-	-	-	-	-	-	-	-	-	V	-	-	-	-	-	-

Pin 7 [11] is grounded for all tests in addition to the pins listed below:

*Ground inputs to inverters not under test.
**Tested only at 25°C.



MOTOROLA Semiconductor Products Inc.

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