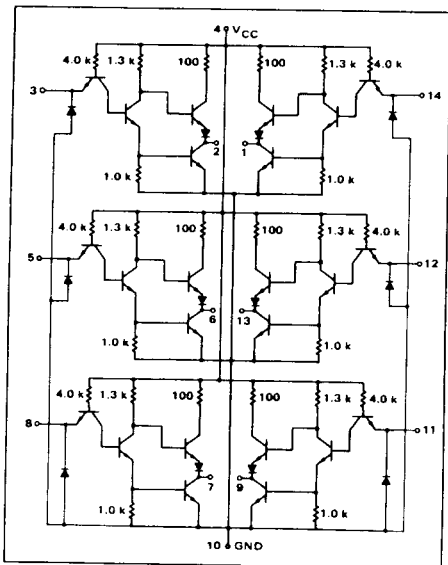


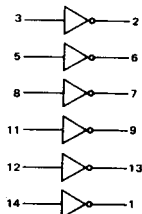
HEX INVERTER

MTTL I MC500/400 series

MC525 · MC575
MC425 · MC475



The Hex Inverter offers six independent inverting gates in a single package. Each gate consists of a single input driving an output inverter.



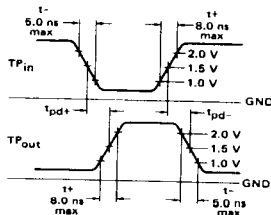
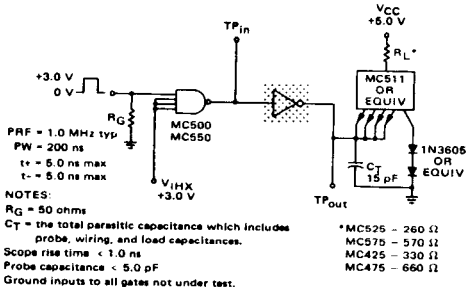
Positive Logic: 2 = $\bar{3}$

Total Power Dissipation = 90 mW typ/pkg
Propagation Delay Time = 10 ns typ

TYPE NO.	INPUT LOADING FACTOR (I_F)	OUTPUT DRIVE (I_{OL})	TEMPERATURE RANGE
MC525 MC575	1 (-1.33 mA)	15 7 MC500 series Gates (20 mA) MC500 series Gates (10 mA)	-55°C to +125°C
MC425 MC475	1 (-1.66 mA)	12 6 MC400 series Gates (20 mA) MC400 series Gates (10 mA)	0°C to +75°C

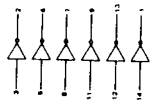
SWITCHING TIME TEST CIRCUIT

VOLTAGE WAVEFORMS AND DEFINITIONS



MC525, MC575/MC425, MC475 (continued)

CRITICAL CHARACTERISTICS
 procedures are shown for only one of the device. To complete testing, reverse through remaining inputs in a similar manner.



Characteristic	Symbol	Pin	MC525, MC575 Test Limits						MC425, MC475 Test Limits						Unit	TEST CONDITIONS												GndT			
			-55°C		+25°C		+125°C		0°C		+25°C		+75°C			mA				Volts											
			Under	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max		I _{OL}	I _{OH}	I _{IN}	V _{IN}	V _{IK}	V _{IK}	V _{IN}	V _{IN}	V _{OH}	V _{OH}	V _{CC}	V _{CC}				
Load Current	I _L	3	-1.33	-1.33	-1.33	-1.33	-1.66	-1.66	-1.66	-1.66	-1.66	-1.66	-1.66	-1.66	-1.66	20	10	-1.5	-0.7	1.0	0.45	2.8	4.5	2.0	1.0	5.5	5.0	-			
Input Current	I _I	3	100	100	100	100	100	100	100	100	100	100	100	100	100	20	10	-1.5	-0.7	1.0	0.45	2.8	4.5	1.7	1.2	5.5	5.0	8.0			
Input Voltage	V _I	3	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	20	10	-1.5	-0.7	1.0	0.45	2.8	4.5	1.4	0.9	5.5	5.0	-			
Output Voltage	V _O	2	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	20	10	-1.2	-0.6	1.0	0.45	3.0	4.5	1.9	1.1	5.5	5.0	-			
Output Current	I _O	2	2.5	2.4	2.7	2.5	2.4	2.5	2.4	2.5	2.4	2.5	2.4	2.5	2.4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Supply Current	I _{CC}	2	250	250	250	250	250	250	250	250	250	250	250	250	250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Supply Voltage	V _{CC}	2	10	45	10	45	10	45	10	45	10	45	10	45	10	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Output Voltage	V _{OL}	2	0.40	0.40	0.40	0.45	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.45	0.45	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Output Voltage	V _{OH}	2	2.8	3.2	3.35	3.0	3.1	3.15	3.0	3.1	3.15	3.0	3.15	3.15	3.15	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Requirements (Device)	I _{max}	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Supply Current	I _{CC}	4	36	36	36	36	45	45	45	45	45	45	45	45	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Supply Voltage	V _{CC}	4	18	18	18	18	18	18	18	18	18	18	18	18	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propagation Delay	t _{pd}	3,2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propagation Delay	t _{pd}	3,2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propagation Delay	t _{pd}	3,2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propagation Delay	t _{pd}	3,2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Inputs to gate not under test during ALL tests unless otherwise noted. All tests must be ungrounded.

Pin-Out