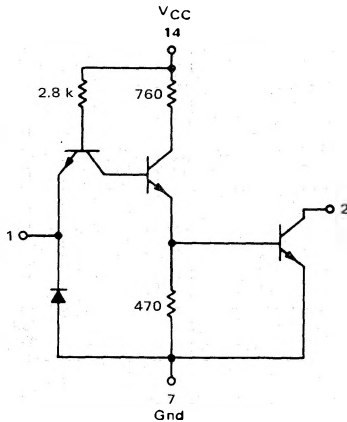


HEX INVERTER

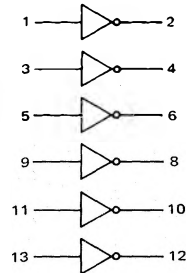
MC3100/MC3000 series

MC3109F • MC3009F
MC3109L • MC3009L,P
 (54H05J) (74H05J,N)

CIRCUIT SCHEMATIC
 1/6 OF CIRCUIT SHOWN



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.



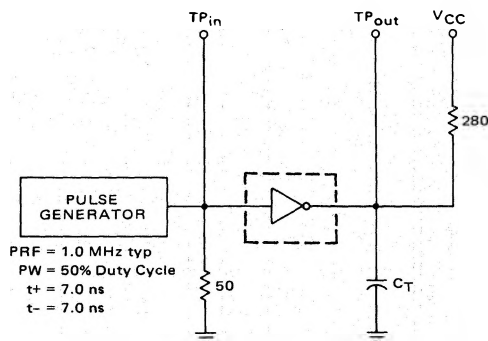
Positive Logic: $2 = \bar{1}$

Input Loading Factor = 1
 Output Loading Factor = 10
 Total Power Dissipation = 90 mW typ/pkg
 Propagation Delay Time = 8 ns typ

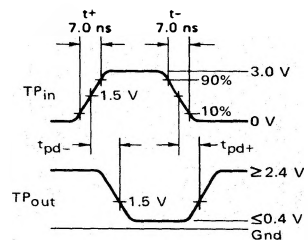
Pin numbers for the 54H05F/74H05F device are shown in the chart. These devices are available on special request.

DEVICE	PIN NUMBERS													
MC3109F/L/3009F,L,P	1	2	3	4	5	6	7	8	9	10	11	12	13	14
54H05F/74H05F	1	14	3	2	5	6	11	8	7	10	9	12	13	4

SWITCHING TIME TEST CIRCUIT AND WAVEFORMS



PULSE GENERATOR
 PRF = 1.0 MHz typ
 PW = 50% Duty Cycle
 $t^+ = 7.0$ ns
 $t^- = 7.0$ ns

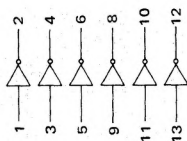


$C_T = 25$ pF = total parasitic capacitance, which includes probe, wiring, and load capacitances.

MC3109, MC3009 (continued)

ELECTRICAL CHARACTERISTICS

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



|--|

* Since this is an inverting gate, power drain is minimized by grounding the inputs to gates not under test.