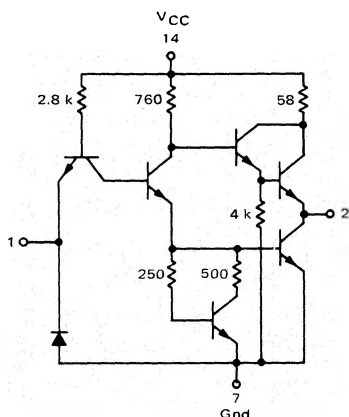


HEX INVERTER

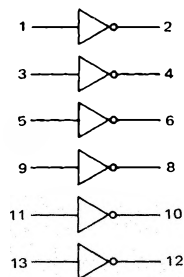
MC3100/MC3000 series

MC3108F • MC3008F
MC3108L • MC3008L,P
 (54H04J) (74H04J,N)

CIRCUIT SCHEMATIC
 1/6 OF CIRCUIT SHOWN



This device offers six independent inverting gates in a single package. Each gate consists of a single input driving an output inverter.



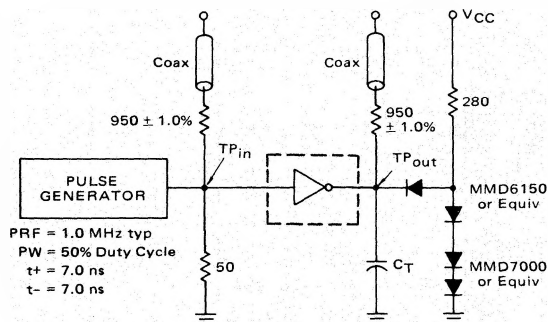
Positive Logic: $2 = \bar{1}$

Input Loading Factor = 1
 Output Loading Factor = 10
 Total Power Dissipation = 140 typ/pkg
 Propagation Delay Time = 6 ns typ

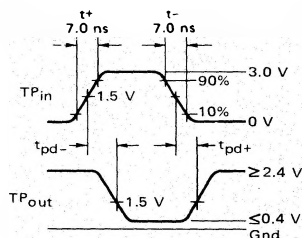
Pin numbers for the 54H04F/74H04F device are shown in the chart. These devices are available on special request.

DEVICE	PIN NUMBERS													
MC3108F,L/3008F,L,P	1	2	3	4	5	6	7	8	9	10	11	12	13	14
54H04F/74H04F	1	14	3	2	5	6	11	8	7	10	9	12	13	14

SWITCHING TIME TEST CIRCUIT AND WAVEFORMS



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.

The coax delays from input to scope and output to scope must be matched. The scope must be terminated in 50-ohm impedance. The 950-ohm resistor and the scope termination impedance constitute a 20:1 attenuator probe. Coax shall be CT-070-50 or equivalent.

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