



**MC5492 • MC7492**  
**MC9392 • MC8392**

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 646) MC7492, MC8392 only.

### COUNT SEQUENCE TRUTH TABLE

| COUNT | OUTPUT |    |    |    |
|-------|--------|----|----|----|
|       | Q3     | Q2 | Q1 | Q0 |
| 0     | 0      | 0  | 0  | 0  |
| 1     | 0      | 0  | 0  | 1  |
| 2     | 0      | 0  | 1  | 0  |
| 3     | 0      | 0  | 1  | 1  |
| 4     | 0      | 1  | 0  | 0  |
| 5     | 0      | 1  | 0  | 1  |
| 6     | 1      | 0  | 0  | 0  |
| 7     | 1      | 0  | 0  | 1  |
| 8     | 1      | 0  | 1  | 0  |
| 9     | 1      | 0  | 1  | 1  |
| 10    | 1      | 1  | 0  | 0  |
| 11    | 1      | 1  | 0  | 1  |

Q0 connected to  $\bar{C}1$

This 4-bit counter is comprised of a divide-by-two section and a divide-by-six section. These sections can be used independently, or can be connected to perform the divide-by-twelve function. When used independently, the divide-by-six section provides the divide-by-three function at the Q2 output and the divide-by-six function at the Q3 output. The outputs may be set to the logic "0" state any time during the counting sequence by setting both R0 inputs to the logic "1" state.

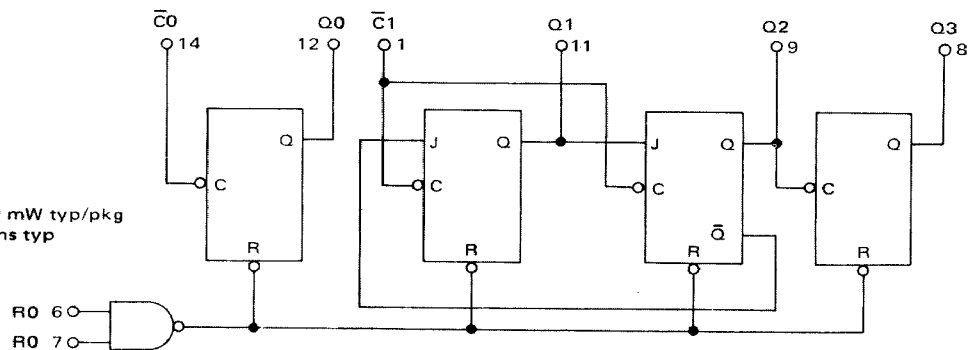
$V_{CC}$  = Pin 5  
Gnd = Pin 10

**Input Loading Factor:**

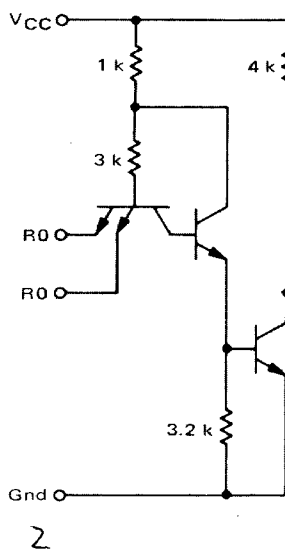
$$\begin{aligned} R0 &= 1 \\ \overline{C0} &= 2 \\ \overline{C1} &= 4 \end{aligned}$$

Output Loading Factor = 10

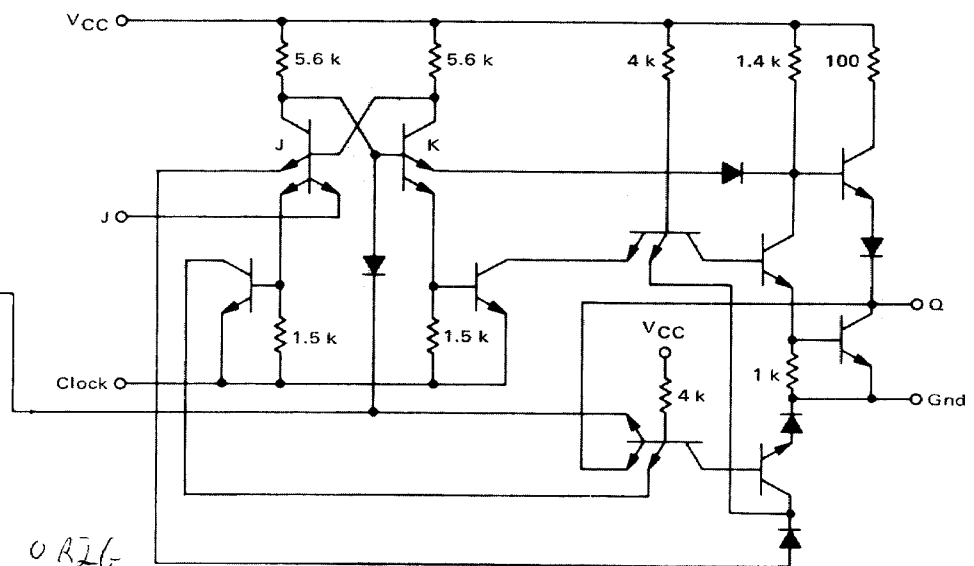
**Total Power Dissipation = 160 mW typ/pkg**  
**Propagation Delay Time = 60 ns typ**



## RESET GATE



### TYPICAL FLIP-FLOP



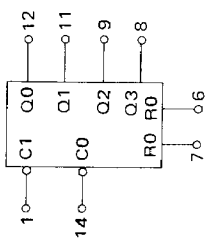
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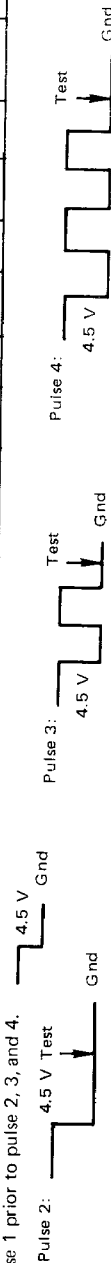
1

## ELECTRICAL CHARACTERISTICS



| TEST CURRENT/VOLTAGE VALUES (All Temperatures) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| mA                                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Volts                                          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|                                                |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\*Apply Pulse 1 prior to pulse 2, 3, and 4.



†Only one output should be shorted at a time.