



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

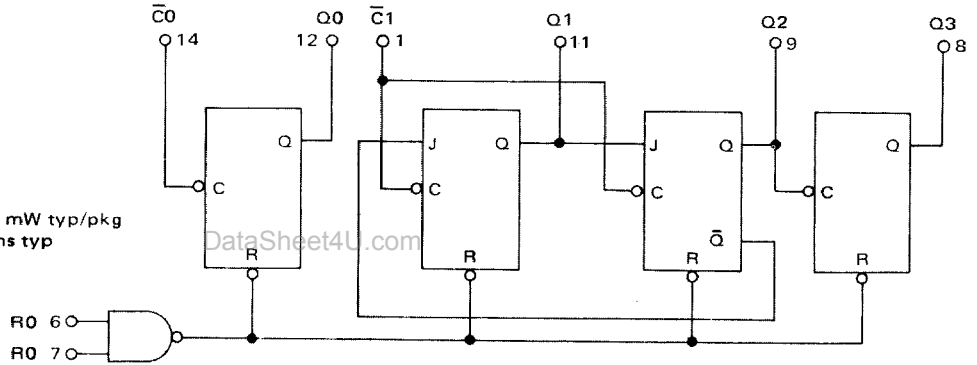
Q0 connected to $\bar{C}1$

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

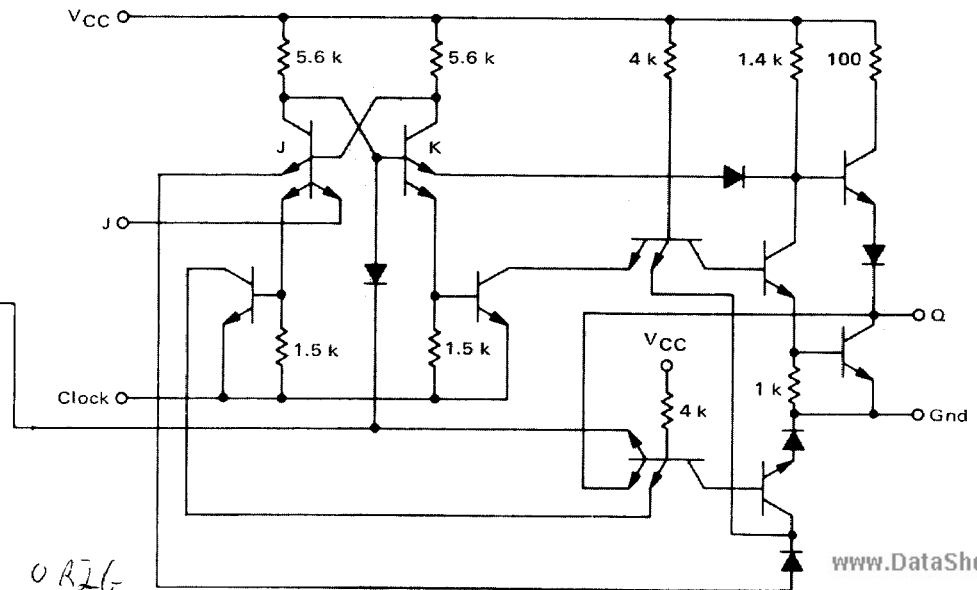
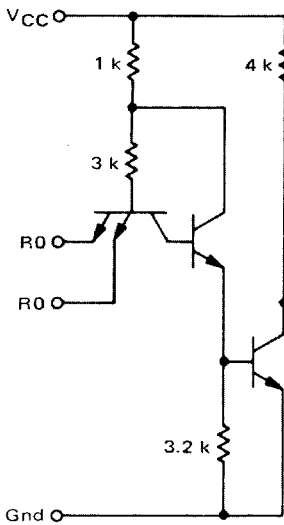
Input Loading Factor:
 R0 = 1
 $\bar{C}0$ = 2
 $\bar{C}1$ = 4

Output Loading Factor = 10
 Total Power Dissipation = 160 mW typ/pkg
 Propagation Delay Time = 60 ns typ

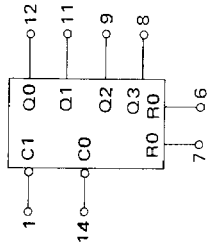


RESET GATE

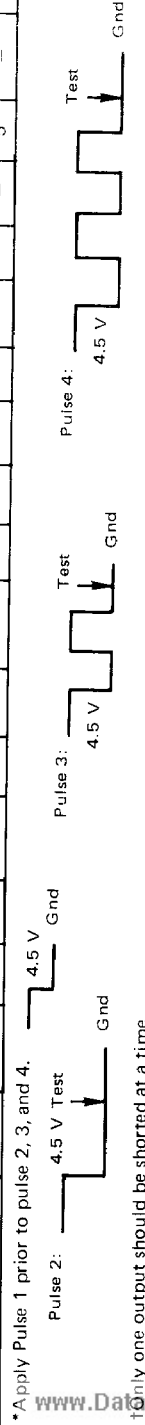
TYPICAL FLIP-FLOP



ELECTRICAL CHARACTERISTICS



TEST CURRENT/VOLTAGE VALUES (All Temperatures)																
mA		Volts														
I _{OL}	I _{OH}	V _{IL}	V _{IH}	V _{IHH}	V _R	V _{IHT}	V _{CC}	V _{CCL}	V _{CCH}							
16	-0.4	0.4	2.4	5.5	4.5	2.0	5.0	4.5	5.5							
16	-0.4	0.4	2.4	5.5	2.0	5.0	4.75	5.0	5.25							
TEST CURRENT/VOLTAGE APPLIED TO PINS LISTED BELOW:																
Characteristic	Symbol	Pin Under Test	Min	Max	Unit	I _{OL}	I _{OH}	V _{IL}	V _{IH}	V _{IHH}	V _R	V _{IHT}	V _{CC}	V _{CCL}	V _{CCH}	Pulse
			MC5492, MC9392 MC7492, MC8392													
			MC5492, MC9392 -55 to +125°C													
			MC7492, MC8392 0 to +75°C													
Input Forward Current	R0 C0 C1	6 7 14	-	-1.6 -1.6 -3.2 -6.4	mAdc	-	-	6 7 14	-	-	7 6	-	-	-	5	-
Leakage Current	R0 C0 C1	6 7 14	-	40 40 80 160	μAdc	-	-	-	6 7 14	-	-	-	-	-	5	-
Output Pulse 2* Output Voltage Short-Circuit Current	Q0	12	-	0.4 -18 -57	Vdc mAdc	12	-	-	-	-	-	6.7	-	5	-	10
Output Voltage	Q1	11	2.4	-	Vdc	-	12	-	-	-	-	-	-	5	-	10
Pulse 3	Q2	9	-	0.4 -18 -57	Vdc mAdc	9	-	-	-	-	-	6.7	-	5	-	10
Pulse 4	Q3	8	-	0.4 -18 -57	Vdc mAdc	8	-	-	-	-	-	6.7	-	5	-	10
Power Requirements (Total Device) Power Supply Drain	I _{CC}	5	-	44	mAdc	-	-	-	-	-	-	-	5	-	-	1, 10, 14



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

Only one output should be shorted at a time.