

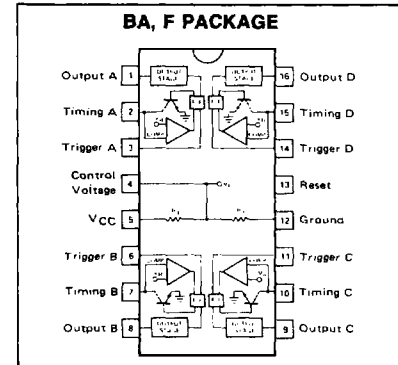
FEATURES

- 100mA OUTPUT CURRENT PER SECTION
- EDGE-TRIGGERED (NO COUPLING CAPACITOR)
- OUTPUT INDEPENDENT OF TRIGGER CONDITIONS
- WIDE SUPPLY VOLTAGE RANGE 4.5V TO 16V
- TIMER INTERVALS FROM MICRO-SECONDS TO HOURS

APPLICATIONS

- SEQUENTIAL TIMING
- TIME DELAY GENERATION
- PRECISION TIMING
- INDUSTRIAL CONTROLS
- QUAD ONE-SHOT

PIN CONFIGURATION



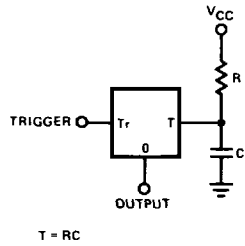
ELECTRICAL CHARACTERISTICS

T_A = 25°C, V_{CC} = +5V to +15V (Unless Otherwise Noted).

PARAMETER	TEST CONDITIONS	LIMITS			UNIT
		MIN	TYP	MAX	
Supply Voltage		4.5		16	V
Supply Current	V _{CC} = 5V, R _L = ∞		18	27	mA
	V _{CC} = 15V, R _L = ∞		22	32	mA
Timing Accuracy	R = 2k to 100k C = 1μF				
Initial Accuracy			1	4	%
Drift With Temperature			150		ppm/°C
Drift With Supply Voltage			0.03	0.1	%/V
Match Between Sections			0.2	0.5	%
Trigger Voltage		0.8	1.6	2.4	V
Trigger Current			10	100	nA
Logical "1"			50	100	μA
Logical "0"			0.63		xV _{CC}
Threshold Voltage			10	100	nA
Threshold Leakage			0.1	0.2	V
Output Voltage (553)	I _L = 10mA		1.0	1.5	V
	I _L = 100mA				V
Output Voltage (554)	I _L = 10mA V _{CC} = 15V	13	14		V
	I _L = 100mA V _{CC} = 15V	12.5	13.5		V
Output Leakage			10	100	nA
Propagation Delay			1.0		μS
Risetime of Output	I _L = 100mA		100		ns
Falltime of Output	I _L = 100mA		100		ns

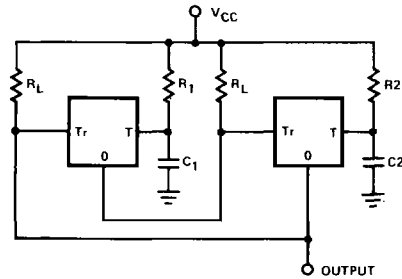
TYPICAL APPLICATIONS

MONOSTABLE OPERATION (ONE SHOT)

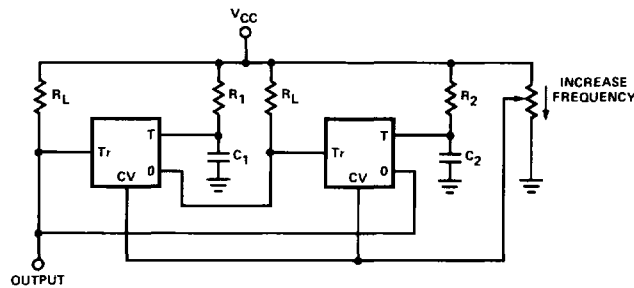


$T = RC$

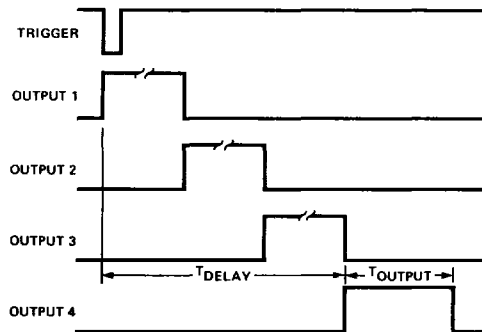
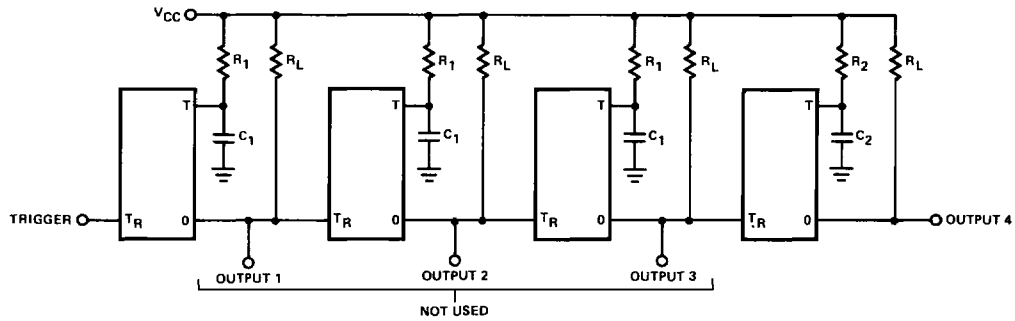
ASTABLE OPERATION (OSCILLATOR)



VARIABLE FREQUENCY OSCILLATOR WITH FIXED DUTY CYCLE



LONG-TIME DELAY



$T_{DELAY} = 3(R_1C_1)$
 $T_{OUT} = R_2C_2$

TYPICAL APPLICATIONS (CONT'D)

