

SCL4047B

MONOSTABLE/ASTABLE MULTIVIBRATOR

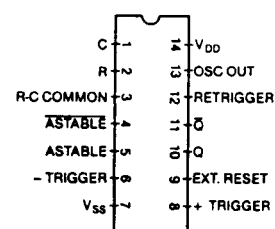
STATIC CHARACTERISTICS: ($V_{SS} = 0V$)

PARAMETER	CONDITIONS	V_{DD} (Vdc)	T_{LOW}^* MIN	MAX	MIN	+25°C TYP	MAX	T_{HIGH}^{**} MIN	MAX	UNIT
QUIESCENT DEVICE CURRENT I_{DD}	$V_{IN} = V_{SS}$ OR V_{DD}	5		1		0.0005	1		30	μA_{dc}
		10		2		0.001	2		60	
		15		4		0.002	4		120	

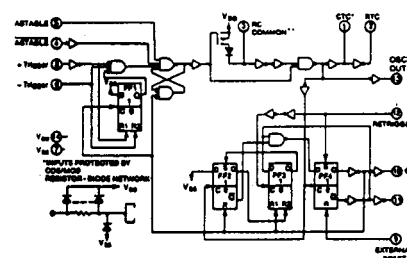
Note: * T_{LOW} = -55°C for C / H devices, -40°C for E / S devices, ** T_{HIGH} = +125°C for C / H devices, +85°C for E / S devices.DYNAMIC CHARACTERISTICS: ($C_L = 50pF$, $T_A = 25^\circ C$)

PARAMETER	V_{DD} Vdc	MINIMUM	TYPICAL	MAXIMUM	UNIT
PROPAGATION DELAY TIME t_{PLH} , t_{PHL} (ASTABLE TO OSC OUT)	5		200	400	ns
	10		100	200	
	15		80	160	
PROPAGATION DELAY TIME t_{PLH} , t_{PHL} (ASTABLE, ASTABLE TO Q Q)	5		550	900	ns
	10		250	500	
	15		200	400	
PROPAGATION DELAY TIME t_{PLH} , t_{PHL} (+ TRIGGER, - TRIGGER TO Q Q)	5		700	1200	ns
	10		300	600	
	15		240	480	
PROPAGATION DELAY TIME t_{PLH} , t_{PHL} (+ TRIGGER, RETRIGGER TO Q Q)	5		300	600	ns
	10		175	300	
	15		150	250	
PROPAGATION DELAY TIME t_{PLH} , t_{PHL} (RESET TO Q Q)	5		300	500	ns
	10		125	250	
	15		100	200	
OUTPUT TRANSITION TIME t_{TLH} , t_{THL} (Q, Q, OSC OUT)	5		100	200	ns
	10		50	100	
	15		40	80	
INPUT PULSE DURATION MINIMUM t_{WL} , t_{WH}	5		500	1000	ns
	10		200	400	
	15		160	320	
RISE & FALL TIME (+ TRIGGER, RETRIGGER) t_{RCL} , t_{FCL}	5			15	μs
	10			5	
	15			5	
INPUT CAPACITANCE (AVG)			5	7.5	pF

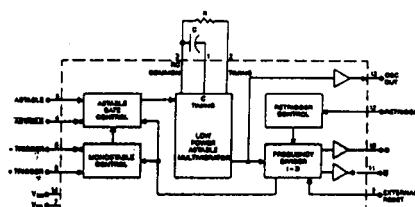
CONNECT DIAGRAM



LOGIC DIAGRAM

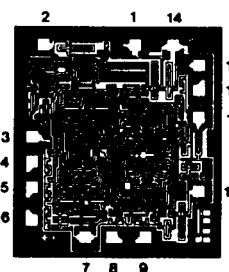


BLOCK DIAGRAM



DIE DRAWING

66 x 74 mils



Note: Refer to "SCL4000B SERIES FAMILY SPECIFICATIONS" for remaining Dynamic & Static Characteristics, and, for recommended and maximum operating conditions.