

**SCL4018B**

PRESETTABLE DIVIDE-BY-N COUNTER

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

PARAMETER	CONDITIONS	$V_{DD}$ (Vdc)	$T_{LOW}^*$		+25°C		$T_{HIGH}^{**}$		UNIT
			MIN	MAX	TYP	MAX	MIN	MAX	
QUIESCENT DEVICE CURRENT $I_{DD}$	$V_{IN} = V_{SS}$ OR $V_{DD}$	5		5	0.05	5		150	$\mu A_{dc}$
		10		10	0.1	10		300	
		15		20	0.2	20		600	

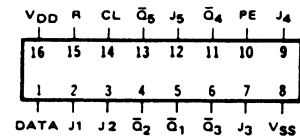
Note: \*  $T_{LOW} = -55^\circ C$  for C / H devices,  $-40^\circ C$  for E / S devices, \*\*  $T_{HIGH} = +125^\circ C$  for C / H devices,  $+85^\circ C$  for E / S devices.

DYNAMIC CHARACTERISTICS: (  $C_L = 50pF, T_A = 25^\circ C$  )

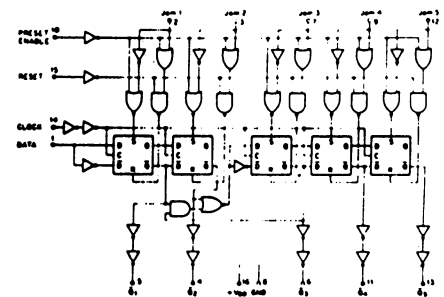
PARAMETER	$V_{DD}$ (Vdc)	MINIMUM	TYPICAL	MAXIMUM	UNIT
PROPAGATION DELAY TIME $t_{PLH}, t_{PHL}$	5		500	1000	ns
	10		150	300	
	15		120	240	
OUTPUT TRANSITION TIME $t_{TLH}, t_{THL}$	5		130	260	ns
	10		65	130	
	15		50	100	
CLOCK PULSE WIDTH MINIMUM $PW_{CL}$	5		200	400	ns
	10		100	200	
	15		80	160	
CLOCK FREQUENCY MAXIMUM $f_{CL}$	5	1.25	2.5		MHz
	10	2.5	5		
	15	3	6		
CLOCK RISE & FALL TIME MAXIMUM $t_{rCL}, t_{fCL}$	5	15			$\mu s$
	10	15			
	15	5			
DATA INPUT SETUP TIME MINIMUM $t_{set}$	5		200	400	ns
	10		100	200	
	15		80	160	
DATA INPUT HOLD TIME MINIMUM $t_{hold}$	5		0	100	ns
	10		0	50	
	15		0	40	
PRE/RESET PROPAGATION DELAY TIME $t_{PLH}, t_{PHL}$ (FROM PE OR RESET INPUT)	5		500	1000	ns
	10		250	500	
	15		200	400	
PRESET OR RESET PULSE WIDTH MINIMUM $PW_{RP}, PW_{R}$	5		200	400	ns
	10		100	200	
	15		80	160	
JAM INPUT SETUP TIME $t_{set}$	5		200	400	ns
	10		100	200	
	15		80	160	
PRESET OR RESET REMOVAL TIME $t_{rem}$	5		375	750	ns
	10		125	250	
	15		90	180	

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

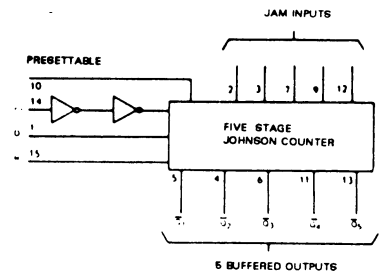
CONNECT DIAGRAM



LOGIC DIAGRAM



BLOCK DIAGRAM



DIE DRAWING

SCL4018B

88 x 72 mils

