SCL4015B

DUAL FOUR STAGE SHIFT REGISTER

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

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

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: (CL = 50pF, TA = 25°C)

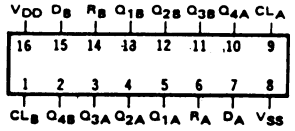
PARAMETER	V_{DD} Vdc	MINIMUM	TYPICAL	MAXIMUM	UNIT
PROPAGATION DELAY TIME t_{PLH}, t_{PHL}	5		250	500	ns
	10		100	200	
	15		90	180	
OUTPUT TRANSITION TIME t_{TLH}, t_{THL}	5		100	200	ns
	10		50	100	
	15		40	80	
CLOCK PULSE WIDTH MINIMUM PW_{CL}	5		200	400	ns
	10		100	200	
	15		80	160	
CLOCK FREQUENCY 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			μs
	10	15			
	15	5			
DATA INPUT/SETUP TIME MINIMUM t_{set}	5		150	300	ns
	10		50	100	
	15		40	80	
DATA INPUT HOLD TIME MINIMUM t_{hold}	5		0	50	ns
	10		0	25	
	15		0	15	

RESET OPERATIONS

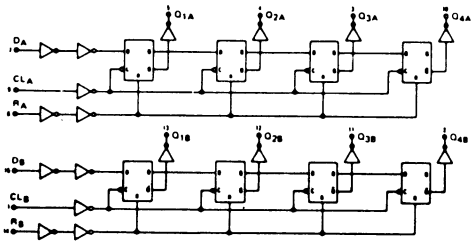
PROPAGATION DELAY TIME t_{PHL}	5		200	400	ns
	10		100	200	
	15		90	180	
RESET PULSE WIDTH MINIMUM PW_R	5		200	400	ns
	10		80	160	
	15		60	120	
RESET REMOVAL TIME t_{rem}	5		375	750	ns
	10		125	250	
	15		100	200	

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

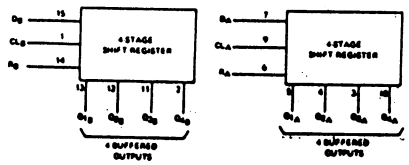
CONNECT DIAGRAM



LOGIC DIAGRAM



BLOCK DIAGRAM



DIE DRAWING

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70 x 70 mils