DC ELECTRICAL CHARACTERISTICS $-55°C \leq T_A \leq +125°C$, $4.5V \leq V_{CC} \leq 5.5V$

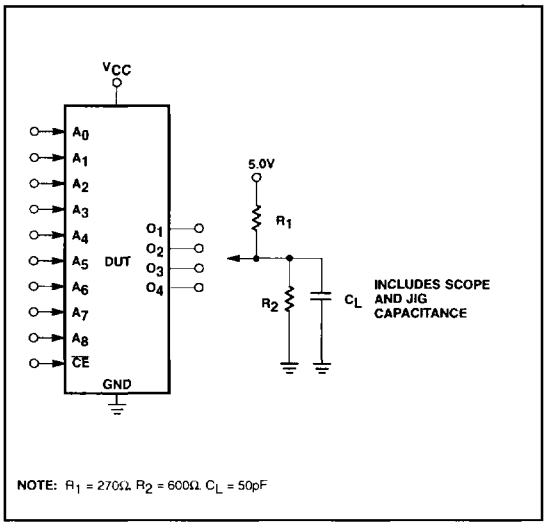
SYMBOL	PARAMETER	TEST CONDITIONS[1, 2]	LIMITS			UNIT
			Min	Typ[5]	Max	
Input voltage						
V_{IL}	Low			0.8		V
V_{IH}	High		2.0			V
V_{IK}	Clamp	V_{CC} = 4.5V, I_I = -18mA			-1.2	V
Output voltage						
		$\overline{CE}$ = Low				
V_{OL}	Low	I_O = 16mA			0.5	V
V_{OH}	High (82S131)	V_{CC} = 4.5V, I_O = -2mA	2.4			V
Input current						
		V_{CC} = 5.5V				
I_{IL}	Low	V_I = 0.45V			-150	µA
I_{IH}	High	V_I = 5.5V			40	µA
Output current[1]						
		V_{CC} = 5.5V				
I_{OLK}	Leakage (82S130)	$\overline{CE}$ = High, V_O = 5.5V			40	µA
I_{OZ}	Hi-Z state (82S131)	$\overline{CE}$ = High, V_O = 5.5V			40	µA
		$\overline{CE}$ = High, V_O = 0.5V			-40	µA
I_{OS}	Short circuit (82S131)[3]	V_{CC} = 5.5V, $\overline{CE}$ = Low, V_O = 0V, High stored	-15		-85	mA
Supply current						
I_{CC}		$\overline{CE}$ = High, V_{CC} = 5.5V			130	mA
Capacitance[6]						
		$\overline{CE}$ = High, V_{CC} = 5.0V				
C_{IN}	Input	V_I = 2.0V		5	10	pF
C_{OUT}	Output	V_O = 2.0V		8	13	pF

AC ELECTRICAL CHARACTERISTICS $-55°C \leq T_A \leq +125°C$, $4.5V \leq V_{CC} \leq 5.5V$

SYMBOL	PARAMETER	TO	FROM	LIMITS			UNIT
				Min	Typ[5]	Max	
t_{AA}	Access time[4]	Output	Address			60	ns
t_{CE}	Access time[4]	Output	Chip Enable			30	ns
t_{CD}	Disable time	Output	Chip Disable			30	ns

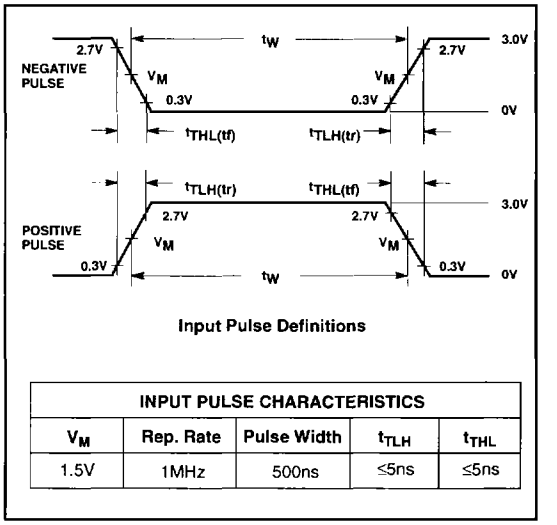
NOTES:
1. Positive current is defined as into the terminal referenced.
2. All voltages with respect to network ground.
3. Duration of short circuit should not exceed 1 second.
4. Tested at an address cycle time of 1µs.
5. Typical values are at V_{CC} = 5V, T_A = +25°C.
6. Guaranteed, but not tested.

TEST LOAD CIRCUITS



NOTE: R_1 = 270Ω, R_2 = 600Ω, C_L = 50pF

VOLTAGE WAVEFORMS



Input Pulse Definitions

INPUT PULSE CHARACTERISTICS				
V_M	Rep. Rate	Pulse Width	t_{TLH}	t_{THL}
1.5V	1MHz	500ns	≤5ns	≤5ns

TIMING DIAGRAMS