

DUAL 4-INPUT GATES

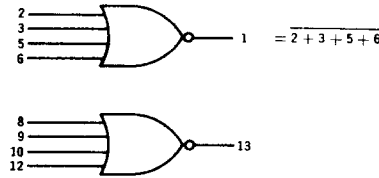
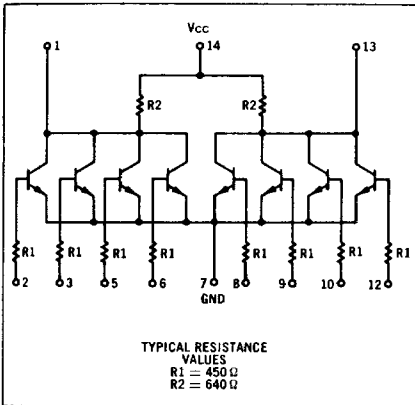
MRTL MC900/800 series

**MC925 • MC825**

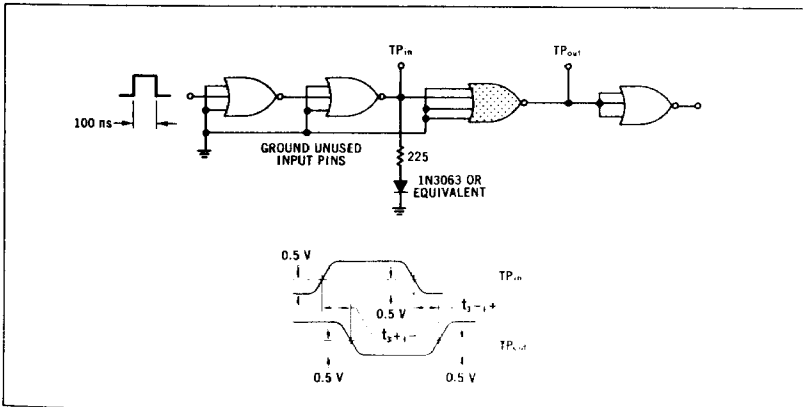


Available in TO-86 Flat Package, Add "F" Suffix.

Two 4-input positive logic NOR gates in a single package may be used independently, paralleled for increasing the number of inputs (subject to loading rules), or cross-connected to form bistable elements.



**SWITCHING TIMES TEST CIRCUIT AND WAVEFORMS**



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**ELECTRICAL CHARACTERISTICS**

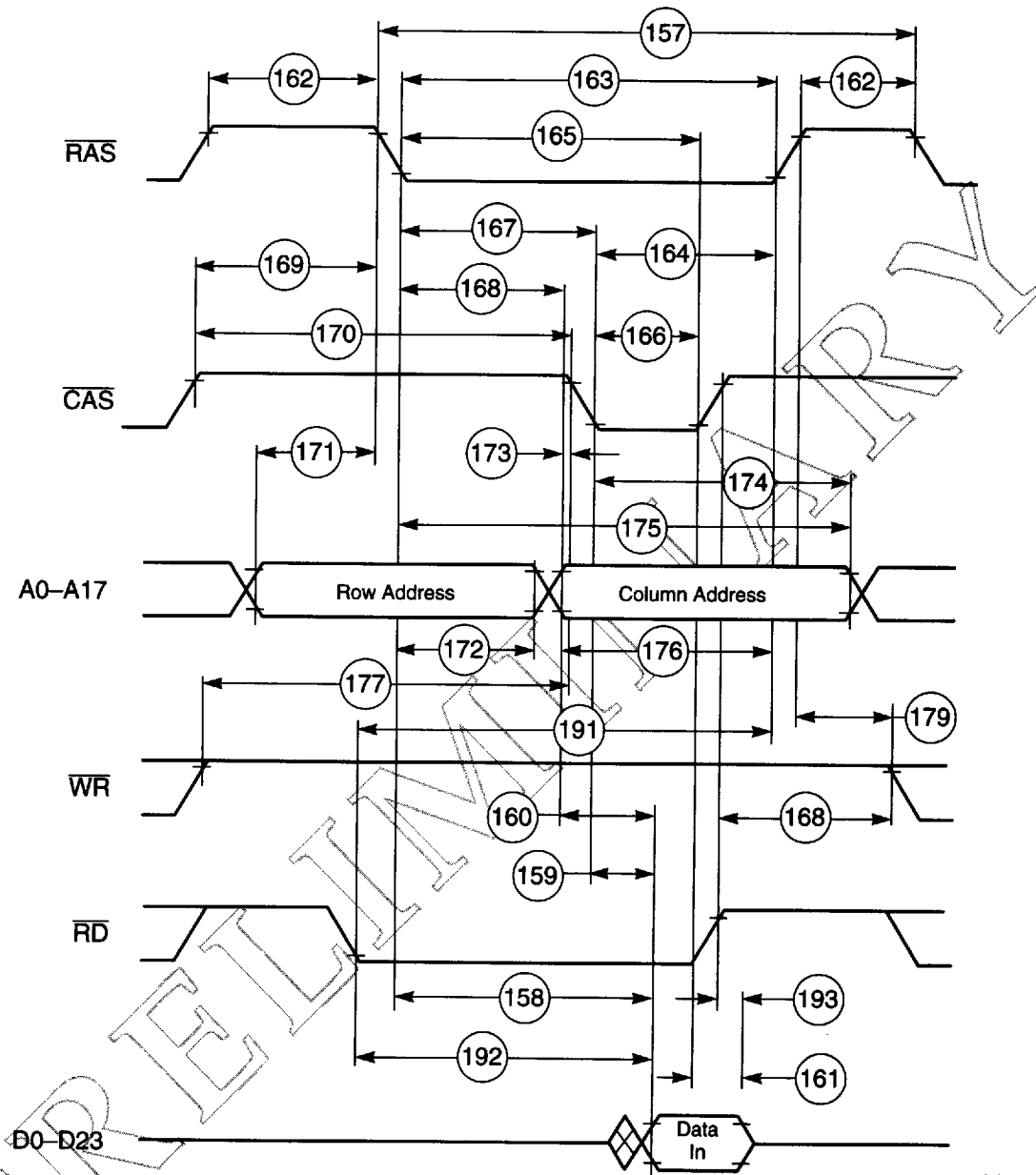
Test procedures are shown for one gate only. Other gates are tested in the same manner.

Characteristic	Symbol	Pin Under Test	TEST VOLTAGE VALUES (Volts)																													
			-55°C				+25°C				+125°C				+100°C																	
			V <sub>in</sub>	V <sub>out</sub>	V <sub>off</sub>	V <sub>cc</sub>	V <sub>in</sub>	V <sub>out</sub>	V <sub>off</sub>	V <sub>cc</sub>	V <sub>in</sub>	V <sub>out</sub>	V <sub>off</sub>	V <sub>cc</sub>	V <sub>in</sub>	V <sub>out</sub>	V <sub>off</sub>	V <sub>cc</sub>														
Input Current	I <sub>in</sub>	2 3 5 6	1.014	1.014	1.50	0.844	0.815	1.50	0.565	3.00	0.874	0.874	1.50	0.320	3.00	0.909	0.909	1.50	0.374	3.00	0.844	0.844	1.50	0.554	3.00	0.710	0.710	1.50	0.370	3.00		
Output Current	I <sub>AS</sub>	1	2.47	-	2.54	-	2.35	-	2.35	-	2.47	-	2.54	-	2.35	-	2.35	-	2.35	-	2.47	-	2.54	-	2.35	-	2.35	-	2.35	-	2.35	-
Output Leakage Current	I <sub>CEX</sub>	1	-	100	-	218	-	235	-	218	-	218	-	218	-	218	-	218	-	218	-	218	-	218	-	218	-	218	-	218	-	
Output Voltage	V <sub>out</sub>	1 ↑	710	-	300	-	320	-	320	-	300	-	300	-	320	-	320	-	320	-	300	-	300	-	300	-	300	-	300	-	300	-
Saturation Voltage	V <sub>CE(sat)</sub>	1 ↑	200	-	210	-	280	-	280	-	210	-	210	-	280	-	280	-	280	-	210	-	210	-	210	-	210	-	210	-	210	-
Switching Time	t	3-1, 3-1*	-	-	-	20	-	28	-	20	-	28	-	20	-	28	-	28	-	20	-	20	-	28	-	28	-	28	-	28	-	

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Input Current	I <sub>in</sub>	2 3 5 6	1.014	1.014	1.50	0.844	0.815	1.50	0.565	3.00	0.874	0.874	1.50	0.320	3.00	0.909	0.909	1.50	0.374	3.00	0.844	0.844	1.50	0.554	3.00	0.710	0.710	1.50	0.370	3.00		
Output Current	I <sub>AS</sub>	1	2.47	-	2.54	-	2.35	-	2.35	-	2.47	-	2.54	-	2.35	-	2.35	-	2.35	-	2.47	-	2.54	-	2.35	-	2.35	-	2.35	-	2.35	-
Output Leakage Current	I <sub>CEX</sub>	1	-	100	-	218	-	235	-	218	-	218	-	218	-	218	-	218	-	218	-	218	-	218	-	218	-	218	-	218	-	
Output Voltage	V <sub>out</sub>	1 ↑	710	-	300	-	320	-	320	-	300	-	300	-	320	-	320	-	320	-	300	-	300	-	300	-	300	-	300	-	300	-
Saturation Voltage	V <sub>CE(sat)</sub>	1 ↑	200	-	210	-	280	-	280	-	210	-	210	-	280	-	280	-	280	-	210	-	210	-	210	-	210	-	210	-	210	-
Switching Time	t	3-1, 3-1*	-	-	-	20	-	28	-	20	-	28	-	20	-	28	-	28	-	20	-	20	-	28	-	28	-	28	-	28	-	

Ground inputs of gate not under test. Other pins not listed are left open.



AA0476

Figure 2-18 DRAM Out-of-Page Read Access

Preliminary Data