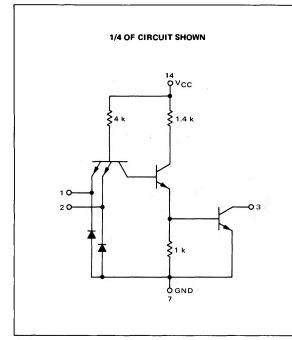
## QUAD 2-INPUT INTERFACE "NAND" GATE

## MC5400/7400 series

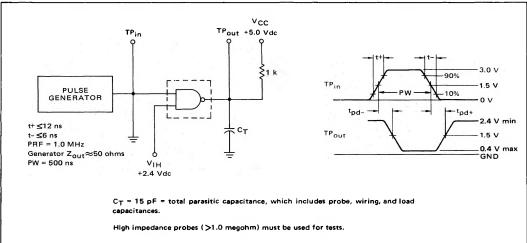
MC5426L\* MC7426P,L\*



\*L suffix = TO-116 ceramic package (Case 632)

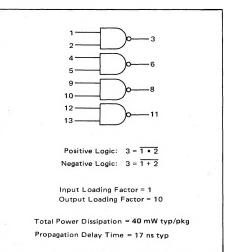
P suffix = TO-116 plastic package (Case 605)

See General Information section for package outline dimensions.



VOLTAGE WAVEFORMS AND DEFINITIONS

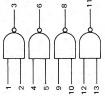
This device features high-output voltage ratings for use as an interface circuit with 12 volt systems, such as low threshold voltage MOS logic circuits. The output is rated at 15 volts, however,  $V_{\rm CC}$  is connected to the standard 5 volt source. The output transistor has a 16 milliamp sink capability at an output voltage of 0.4 volt maximum, thus allowing high fanout drive capability while maintaining the nominal power dissipation of the standard gate.



SWITCHING TIME TEST CIRCUIT

ELECTRICAL CHARACTERISTICS

Test procedures are shown for only one gate. The other gates are tested in the same manner. Further, test procedures are shown for only one input of the gate under test. To complete testing, sequence through re-maining inputs.



									E	MA				Volts		Volts					
									loL	HOI	VIL	нιν	VR1	VR2	V <sub>th</sub> 1	V <sub>th</sub> 0	нол	vcc	VCCL	VCCH	
								MC5426	16	1	0.4	2.4	4.5	5.5	2.0	0.8	12	5.0	4.5	5.5	
								MC7426	16	-	0.4	2.4	4.5	5.5	2.0	0.8	12	5.0	4.75	5.25	
		Pin	MC5426 1	426 Test L	Fest Limits	MC7	MC7426 Test Limits	Limits				TEST CI	JRRENT/	OLTAGE	APPLIED T	TEST CURRENT/VOLTAGE APPLIED TO PINS LISTED BELOW:	ED BELOV	٧:	-		
Characteristic	Cumbol	Under	ici uiw	-02 to +125-C	1	Min	U to /U <sup>-C</sup>		2	lou		Viu	Vo.	Ver	V.h. 1	V.h.V	Vou	Vrr	Vcci	VCCH	Pre C
Input Forward Current	lF	- 1	. I	-1.6	mAdc	1	-1.6	mAdc	5 1	5		. 1	2		5		5 1	3 1	1	14	*
Leakage Current	IR1		1	40	μAdc	1	40	μAdc	1	ſ	1	-	1	I	1	1	1	ŀ	1	14	2,7*
	IR2	-	1	1.0	mAdc	1	1.0	mAdc	1	I,	1	-1	1	-	I)	1	1	1	1	14	2,7*
Output Output Voltage	Vol	m	1	0.4	Vdc	1	0.4	Vdc	m	- 1	1	< Î	П.	, i	1,2	1	1	1	14	I	*1
	ЧОН	e	15	1	Vdc	15	I	Vdc	Ι.	3	-	1	I	1	1	2	1	T	1,14	1	*L
Output Current	но	3	1	50	μAdc	aate	50	μAdc	1	Ι.	1	1	1	1	L	2	3	1	1,14	1	* 4
Power Requirements (Total Device) Power Supply Drain	HOd	14	1	22	mAdc	- 1 2	22	mAdc	2 - 2 <sub>1</sub>	ана ( 1. 1. 2 1.		I,	· í	1	. 1	Ĩ	I	12	I	14	٤
	IPDL	14	1	8.0	mAdc	i I	8.0	mAdc	1	1	1	1	1	I	1	1	1	1	I	14	1,4,7,9,12
Switching Parameters					9 · · ·				Pulse In	Pulse Out											
Turn-On Delay	tpd-	1,3	í.	17**	su	ľ	17**	su	-	3	d.	2	ŕ	1	1	1	1	14	1	I	7
Turn-Off Delay tpd+	tpd+	1,3	ì	24**	su	1	24**	us su	1	e		2	Ŀ	1	1.	1	1	14	í	1	4