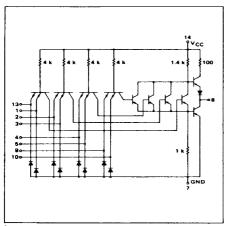
4-WIDE 2-INPUT
"AND-OR-INVERT" GATE

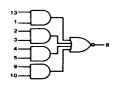
MTTL MC7400P series MTTL MC5400L/7400L series

MC5454L* MC7454P.L*



*L suffix = TO-116 ceremic package (Case 632)
P suffix = TO-116 plastic package (Case 606)
See General Information section for package outline dimensions.

This device consists of four 2-input AND gates ORed together and inverted.



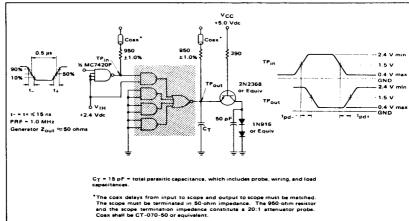
Positive Logic: 8 = (13 - 1) + (2 - 3) + (4 - 5) + (9 - 10) Negative Logic: 8 = (13 + 1) + (2 + 3) + (4 + 5) + (9 + 10)

Input Loading Factor = 1
Output Loading Factor = 10

Total Power Dissipation = 22 mW typ/pkg Propagation Delay Time = 13 ns typ

SWITCHING TIME TEST CIRCUIT

VOLTAGE WAVEFORMS AND DEFINITIONS



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	ŢΪ	7										TEST	URREN	T/VOLTA	TEST CURRENT/VOLTAGE VALUES (All Temperatures)	(All Tem	Peratures				
	ΪĴ	캣	۲						μA						Volts						1
	, m	ጎ)						_ŏ	_₹	٨	_ >±	₹	قح	7	>=	° *	۷	70	7	7
	5	1					Ī	MCSASA	16	-0.4	9.0	2.4	5.5	4.5	5.0	2.0	8.0	↓_	5	6.5	•
							ž	MC7454	16	-0.4	0.4	2.4	5.5	4.5	5.0	2.0	8.0	2.0	4.75	2, 2,	_
		ë i		MC5454 Test Limits 55 to +125°C	Limits	MCA.	MC7454 Test Limits 0 to +70°C	iii r			_	EST CUR	RENT?	/OLTAGE	TEST CURRENT/VOLTAGE APPLIED TO PINS LISTED BELOW:	O PINS LI	STED BE	8			-1
Characteristic	Symbol	Test		Wax	Ē	į	¥ã¥	Ē	_ő	_₹	>"	>	>	ةد	2	>	2	^2	>	>	į
Input Forward Current	4.	-		-1.6	mAdc		-1.6	шУфс			-		-	2			,	3 .	1	ž .	
Leakage Current	^L R1		,	9	r A dc		ş	пАФС			١.	-	+-				<u> </u> .			7	2,3,4,5,7,9,10,13
	1 _{R2}	1		0.1	mAdc		1.0	mAdc			<u> </u>	T,						Ŀ		7.	2.3.4.5.7.9.10.13
Output Output Voltage	v _{OL}	- 00	,	6.4	Vdc		4.	γφΛ			,		ļ .	T .		1,13			7 2		2,3,4,5,7,9,10
	, ОН		2.4		Vdc	2.4		γqc			·		 	3,5,10,			1,2,4,9	1.	=		Ŀ
Short-Circuit Current	၁ၭႋ	80	-20	-55	mAdc	92	55.	mAdc			-	ļ.	† .		1.		1	Ŀ		2	1.2.3.4.5,7.8,9,10,13
Power Requirements				ļ							\dagger	†	1							Ĺ.,	
Power Supply Drain	PDH	72		8.5	mAdc		9.3	mAdc							9,10,13			7			۲-
	1 PDL		,	7.2	mAdc	,	7.2	mAde			-	-	-					2			1,2,3,4,5,7,9,10,13
Switching Parameters					_				Pulse	Pulse	\vdash	†-	+-								
Turn-On Delay	k	8,		:	ž.		15:	£			-	3		,	t			<u>*</u>			2.3,4,5,7,9,10
Turn-Off Delay	Ĩġ	8.1		62	×ii	ļ.	29	á	-	æ	+-	<u> </u>	-	1.	-			3			2,3.4,5,7,9,10
		1	1		1				1		1	-	$\frac{1}{2}$	1							

Ted only at 25% C

ELECTRICAL CHARACTERISTICS Test procedure are shown for only one input of this device. To complete testing, sequence through remaining inputs in the