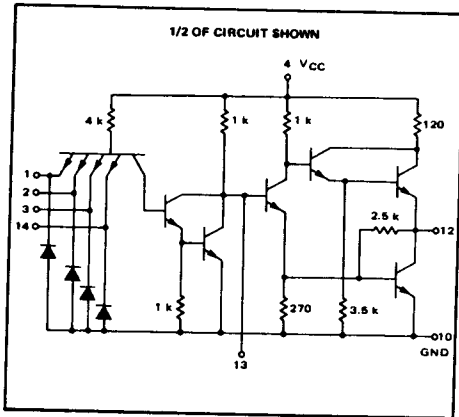


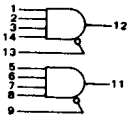
"OR" EXPANDABLE
DUAL 4-INPUT "AND" GATE

MTTL | MC500/400 series

MC527 · MC577
MC427 · MC477



This device consists of two 4-input logical AND gates. Each gate has a single point connected externally which enables a single wire OR expansion using the MC528 expander. Up to 10 input gates can be OR'ed together without adversely affecting fan out, noise immunity, or dynamic characteristics.

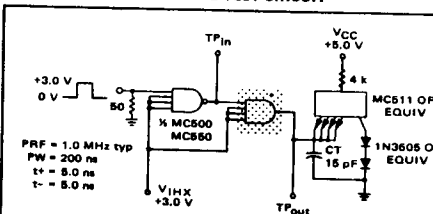


Positive Logic:
12 = 1 + 2 + 3 + 14 + Exp.
Negative Logic:
12 = 1 + 2 + 3 + 14 + Exp.

Total Power Dissipation = 38 mW typ/pkg
Propagation Delay Time = 10 ns typ

TYPE NO.	INPUT LOADING FACTOR	(I _F)	OUTPUT DRIVE	(I _{OL})	TEMPERATURE RANGE
MC527	1	(-1.33 mA)	15 MC500 series Gates	(20 mA)	-55°C to +125°C
MC577			7 MC500 series Gates	(10 mA)	
MC427	1	(-1.66 mA)	12 MC400 series Gates	(20 mA)	0° to +75°C
MC477			6 MC400 series Gates	(10 mA)	

SWITCHING TIME TEST CIRCUIT



C_T = the total parasitic capacitance which includes probe, wiring and load capacitances.
Scope rise time < 1.0 ns
Probe capacitance < 5.0 pF
Ground inputs to all gates not under test.
*Expander pins should be open during test.

VOLTAGE WAVEFORMS AND DEFINITIONS

