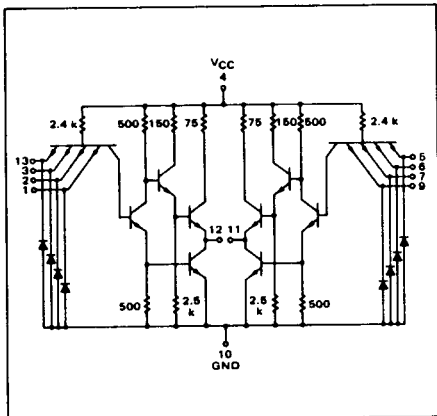


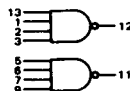
DUAL 4-INPUT LINE DRIVER

MTTL I MC500/400 series

MC507 • MC557
MC407 • MC457



Each of the two independent drivers in the package consists of a 4-input AND gate driving an output inverter. The output inverter is capable of supplying twice the drive of the basic gates. The line driver is especially useful for driving high capacitive loads or for driving large fan-outs such as the numerous clock inputs of large counters.



Positive Logic:
12 = 1 + 2 + 3 + 13
Negative Logic:
12 = 1 + 2 + 3 + 13

Total Power Dissipation = 60 mW typ/pkg
Propagation Delay Time = 25 ns typ @ 1000 pF Load

| TYPE NO. | INPUT LOADING FACTOR (I _F) | OUTPUT DRIVE (I _{OL}) | TEMPERATURE RANGE |
|----------------|--|--|-------------------|
| MC507 MC557 | 1.5 (-2.0 mA)* | 30 MC500 series Gates (40 mA) 15 MC500 series Gates (20 mA) | -55°C to +125°C |
| MC407 MC457 | 1.5 (-2.5 mA)* | 24 MC400 series Gates (40 mA) 12 MC400 series Gates (20 mA) | 0°C to +75°C |

*Use I_F value of gate being driven (-1.33 or -1.66) to calculate output drive capability of line driver.

SWITCHING TIME TEST CIRCUIT

VOLTAGE WAVEFORMS AND DEFINITIONS

