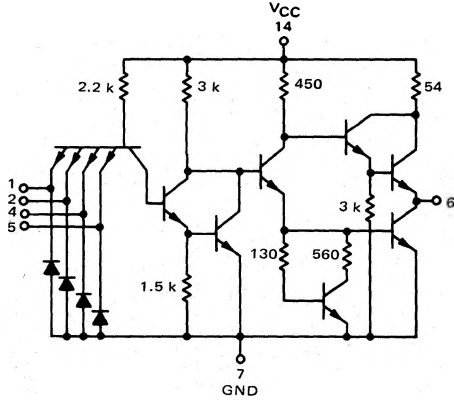


DUAL 4-INPUT "AND"  
POWER GATE

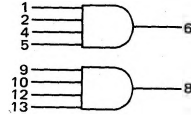
MC3100/MC3000 series

MC3126F • MC3026F  
MC3126L • MC3026L,P

CIRCUIT SCHEMATIC  
1/2 OF CIRCUIT SHOWN



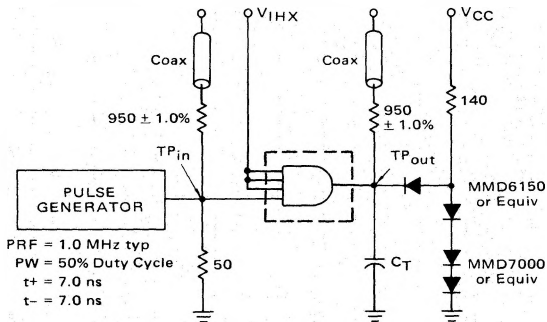
This device consists of two 4-input AND power gates. Each gate is designed for driving high fan-out loads (20).



Positive Logic:  $6 = 1 + 2 + 4 + 5$   
Negative Logic:  $6 = 1 + 2 + 4 + 5$

Input Loading Factor = 1.3  
Output Loading Factor = 20  
Total Power Dissipation = 90 mW typ/pkg  
Propagation Delay Time = 9.0 ns typ

SWITCHING TIME TEST CIRCUIT AND WAVEFORMS



PRF = 1.0 MHz typ  
PW = 50% Duty Cycle  
 $t^+ = 7.0$  ns  
 $t^- = 7.0$  ns

$C_T = 25$  pF = total parasitic capacitance, which includes probe, wiring, and load capacitances.

The coax delays from input to scope and output to scope must be matched. The scope must be terminated in 50-ohm impedance. The 950 ohm resistor and the scope termination impedance constitute a 20:1 attenuator probe. Coax shall be CT-070-50 or equivalent.

