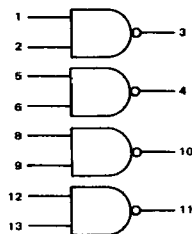
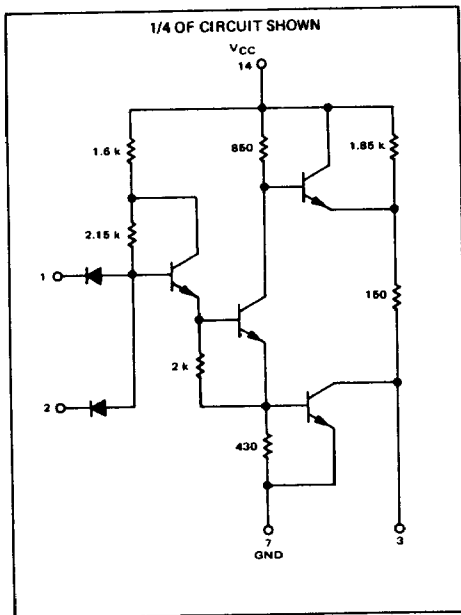


QUAD 2-INPUT
"NAND" BUFFER

MDTL MC930/830 series

MC957F · MC857F,P

This buffer element consists of four 2-input inverting drivers. This unit is designed especially for driving large capacitive loads at high speeds. An output emitter follower in series with a 150-ohm resistor drives the output to the high voltage level. A low saturation resistance transistor is turned on, pulling the output down to the low voltage level, and providing rapid discharge of capacitive loads.



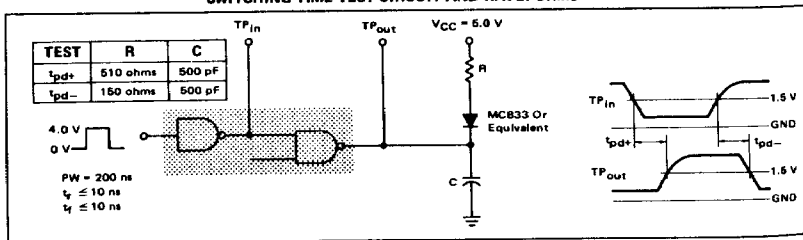
Positive Logic: $3 = \overline{1 \cdot 2}$
Negative Logic: $3 = 1 + 2$

Input Loading Factor = 1
Output Loading Factor = 25
Total Power Dissipation = 170 mW typ/pkg
Propagation Delay Time = 36 ns typ

OPERATING RULES

- The outputs of the Quad Buffer may not be tied together.
- For increased current capability, the inputs and outputs of $\frac{1}{4}$ MC957 and $\frac{1}{4}$ MC958 can be paralleled (up to and including 4 common outputs). The combined output will equal 100 loads while each combined input will equal 4 loads.

SWITCHING TIME TEST CIRCUIT AND WAVEFORMS



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PRODUCT DOCUMENTATION

The three documents listed in the following table are required for a complete description of the DSP56301 and are necessary to design properly with the part. Documentation is available from one of the following locations (see back cover for detailed information):

- A local Motorola distributor
- A Motorola semiconductor sales office
- A Motorola Literature Distribution Center
- The World Wide Web (WWW)

See the **Additional Support** section of the *DSP56300 Family Manual* for detailed information on the multiple support options available to you.

Table 1 DSP56301 Documentation

Name	Description	Order Number
DSP56300 Family Manual	Detailed description of the DSP56300 family processor core and instruction set	DSP56300FM/AD
DSP56301 User's Manual	Detailed functional description of the DSP56301 memory configuration, operation, and register programming	DSP56301UM/AD
DSP56301 Technical Data	DSP56301 features list and physical, electrical, timing, and package specifications	DSP56301/D

