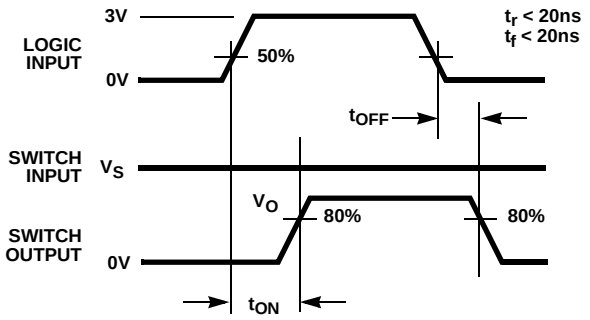
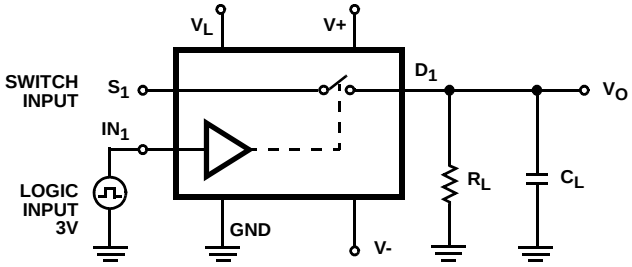
## Test Circuits and Waveforms

$V_O$ is the steady state output with the switch on. Feedthrough via switch capacitance may result in spikes at the leading and trailing edge of the output waveform.




NOTE: Logic input waveform is inverted for switches that have the opposite logic sense.

FIGURE 1A. MEASUREMENT POINTS




Repeat test for Channels 2, 3 and 4.
For load conditions, see Specifications. $C_L$ includes fixture and stray capacitance.

$$V_O = V_S \frac{R_L}{R_L + r_{DS(ON)}}$$

FIGURE 1B. TEST CIRCUIT

FIGURE 1. SWITCHING TIMES

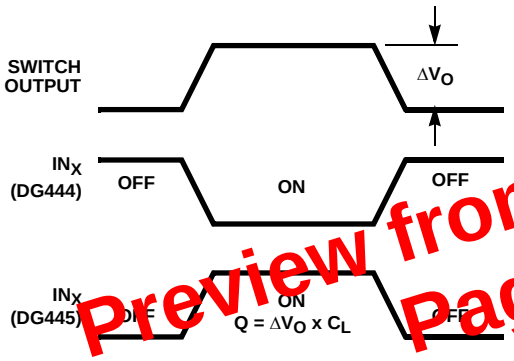



FIGURE 2A. MEASUREMENT POINTS

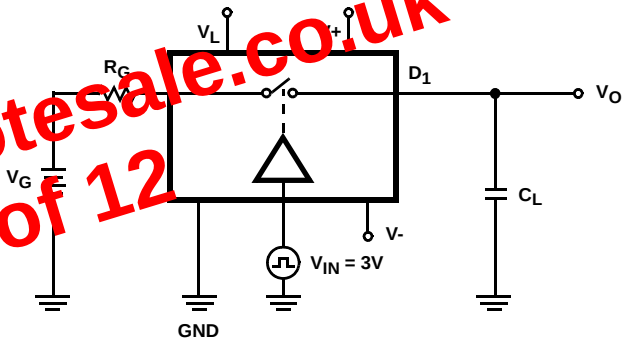



FIGURE 2B. TEST CIRCUIT

FIGURE 2. CHARGE INJECTION



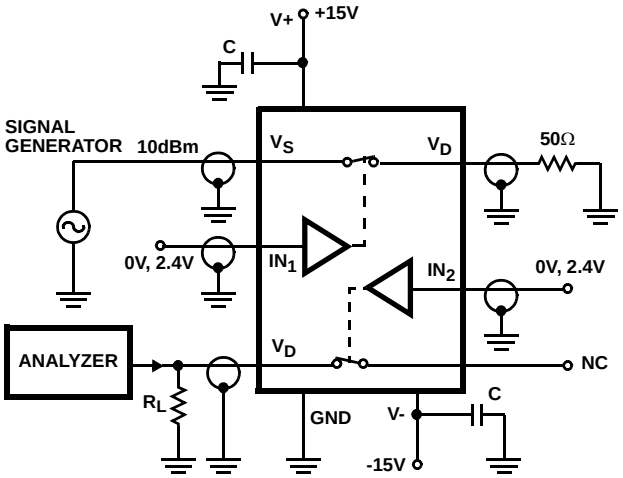



FIGURE 3. CROSSTALK TEST CIRCUIT

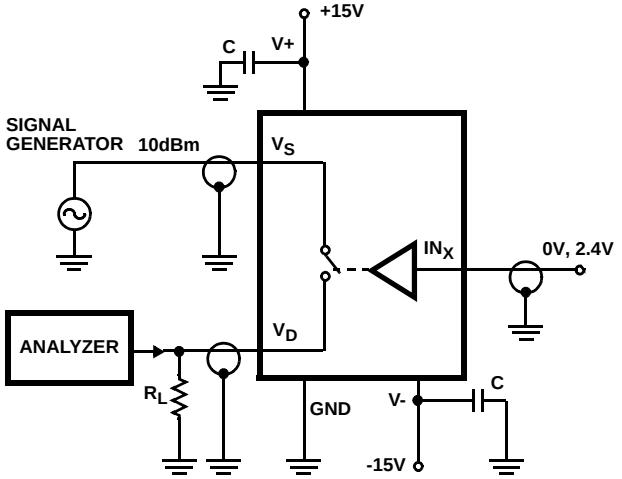



FIGURE 4. OFF ISOLATION TEST CIRCUIT

## Typical Performance Curves (Continued)

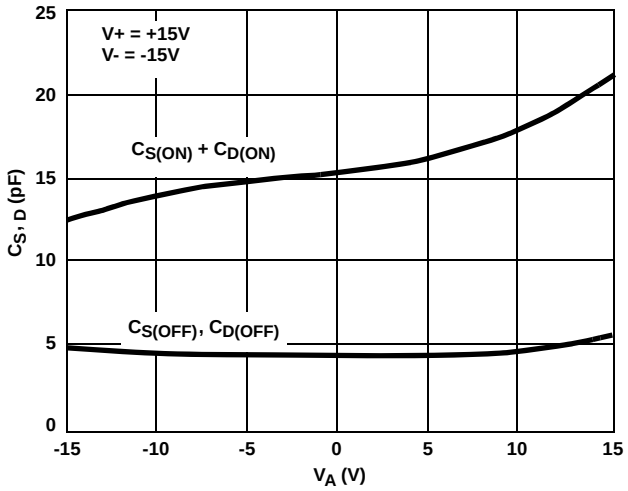



FIGURE 14. SOURCE/DRAIN CAPACITANCE vs ANALOG VOLTAGE

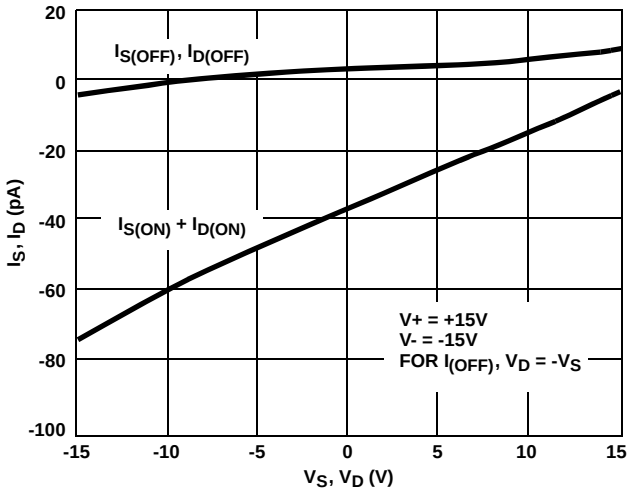



FIGURE 15. LEAKAGE CURRENTS vs ANALOG VOLTAGE

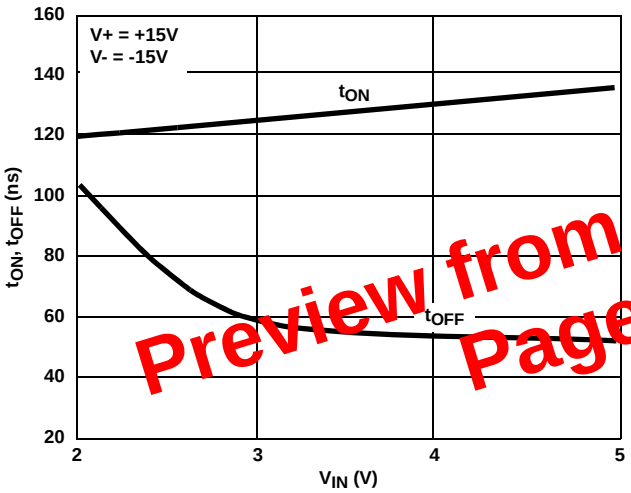



FIGURE 16. SWITCHING TIME vs INPUT VOLTAGE (DG444)

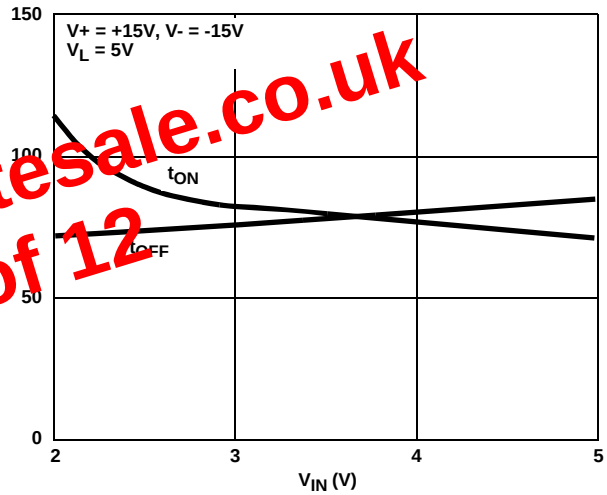



FIGURE 17. SWITCHING TIME vs INPUT VOLTAGE (DG445)



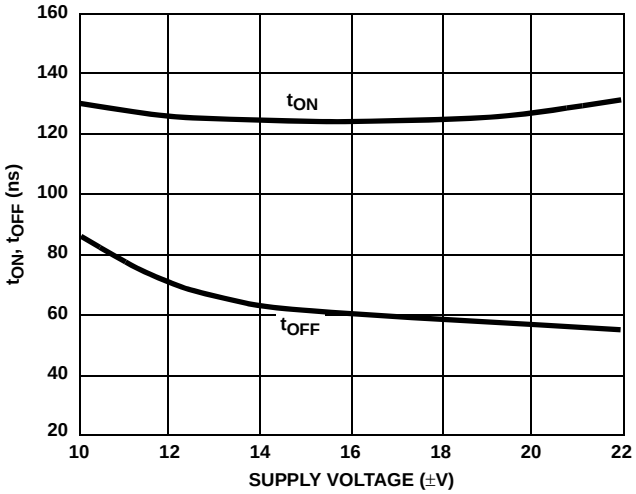



FIGURE 18. SWITCHING TIME vs POWER SUPPLY VOLTAGE (DG444)

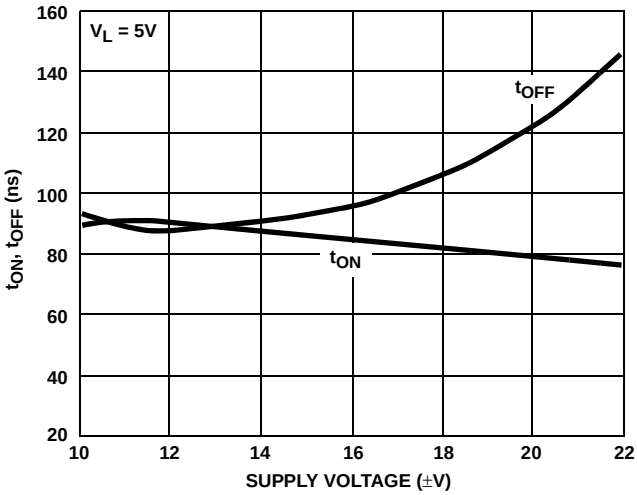



FIGURE 19. SWITCHING TIME vs POWER SUPPLY VOLTAGE (DG445)