

This directory contains data from a set of n -channel MOS transistors with different geometries. Two types of data are provided:

- $I_D(V_{GS})$ characteristics for several values of V_{SB} , for both a low and high value of V_{DS} ,
- $I_D(V_{DS})$ characteristics for several values of V_{GS} , for both a low and high value of V_{SB} .

The filename for the first ends in “_idvg.data” and the filename for the second ends in “_idvd.data” and the leading parts of each filename indicate the transistor geometry, denoted as “Wwww_Lllll” where www indicates the width of the transistor and $llll$ is the length of the transistor, both in units of nm. The oxide thickness for all devices is $t_{ox} = 10.5$ nm. 9 geometries are provided, as noted in the following table.

W=25.0 μm	×	×	×	×	×
W=2.0 μm					×
W=1.0 μm					×
W=0.8 μm					×
W=0.6 μm					×
	L=0.6 μm	L=0.8 μm	L=1.0 μm	L=2.0 μm	L=25.0 μm

Column headings in the data files indicate what each column contains.

The problems in Chap. 10 use the data provided in this directory. It is specifically requested to use the data for the $W/L = 25\mu\text{m}/25\mu\text{m}$ device for Probs. 10.10 and 10.14, but it should also be used for illustrating the solutions to Probs. 10.4 through 10.8 and Probs. 10.11 through 10.13.