

**GEORGIA INSTITUTE OF TECHNOLOGY**  
**School of Electrical and Computer Engineering**

ECE 4410

Notes

Fall 2003

**Standard Component Values**

Electronic components are made in values that give the maximum yield in the manufacturing process. This results in a constant percentage difference in the size of the component. While primarily used for resistors, the same values are often used for capacitors and inductors.

Five-percent Values	Ten-Percent Values
1.0	1.0
1.1	
1.2	1.2
1.3	
1.5	1.5
1.6	
1.8	1.8
2.0	
2.2	2.2
2.4	
2.7	2.7
3.0	
3.3	3.3
3.6	
3.9	3.9
4.3	
4.7	4.7
5.1	
5.6	5.6
6.2	
6.8	6.8
7.5	
8.2	8.2
9.1	
10.	10.

The values listed are scaled to any desired power of ten. For example, you could have capacitors with values:

2.2 pF      22 pF      220 pF      2.2 nF      22  $\mu$ F

Resistors and inductors are scaled in a similar manner.