

# ***Understanding Standard Component Values***

## ***Standard Resistor Values (10% / 20%)***

10 Ω	12 Ω	15 Ω	18 Ω	22 Ω	27 Ω	33 Ω	39 Ω	47 Ω	56 Ω
68 Ω	75 Ω	82 Ω	91 Ω						

Note: This sequence merely repeats at each decade. For example, the next standard values are 100 Ω, 120 Ω, 150 Ω, and so on.

## ***Standard Sub-microfarad Capacitor Values (Non-Electrolytic)***

1 nF	2.2 nF	3.3 nF	3.9 nF	4.7 nF	5.6 nF	6.8 nF	7.5 nF	8.2 nF	10 nF
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This sequence repeats just like the resistor sequence.

## ***Standard Capacitor Values Above 1 μF (Electrolytic)***

1 μF	2.2 μF	4.7 μF	10 μF	22 μF	47 μF	100 μF	220 μF	470 μF	1000 μF
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Note: Electrolytic capacitors have a typical tolerance of +80 %, -20%