

## Tips, Tricks and Common Mistakes

### 1) Polarity Matters!!!

**“Although some components will just burn when connected incorrectly, others will fight back”.**

### 2) Please check the datasheet.

**“It is an essential part of circuit building to check the datasheet and make sure that the component matches your specifications. E.g., Max Current, voltage, temperature ratings. “**

### 3) Same Components come in different packages.

**“Always be sure that the component you need is in the correct package. E.g., TO-220 through hole package”.**

### 4) If you're not sure which component you need or how it works, just ask.

**“If you are unsure on how a certain component/device works, it's always worth checking online yourself. Just in case there is an example or guide to follow. But don't be afraid to ask for help if you are still unsure”.**

### 5) Final year projects and needing components. Don't just say “I Want a Regulator”.

**“As an engineer you should speak in technical terms and be SPECIFIC. For instance, if you need a regulator, you need to either state the part number for a part you have researched and found suitable for your project OR you present a list of specifications that you require and a suitable part \*may be available in the lab”.**