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#### USB LAMP KIT

This USB powered lamp kit is a simple and economical way of producing cost effective lighting projects. It can be used to produce reading and Mood light projects via USB mobile phone mains chargers or via your USB port in your computer. This self-assembly kit comes with an open-ended USB cable that attaches to a high powered resistor and a switch that can be attached anywhere that allows a 25mm opening. These components are connected to a bright 1 watt power LED that is small enough to fit in compact spaces. The 1 Watt LED can be used with a range of materials including acrylic, wood and metal. The kit is easily assembled in a classroom environment with a soldering iron and a flat head screwdriver.

## **SPECIFICATION**

Low consumption, high brightness Energy-saving and environmentally friendly

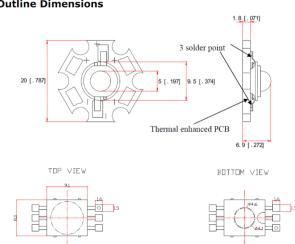
The light is harmless for skin and eyes

Forward Current: 300-350mA Forward Voltage: 3.2-3.4V Viewing Angle: 120 degrees Luminous Flux: 90-100LM

Output Power: 1W Colour Temperature:

Warm White: 3000-3200K

#### **Outline Dimensions**



# Using the LED Circuit

The 1w LED forward voltage is rated at 3.2-3.4v. A 12ohm current limiting resistor is used to cut the typical voltage from a USB output from 5v to 3.2v. It will reduce the current from typically 500ma to 300ma. It is recommended that you use only one 1w LED per power source. The best power source will be from a mobile phone mains charger. It is also recommended that your design has some form of ventilation as the 1w LED and the heatsink will get hot. This circuit is not recommended to be used with Card, Cardboard or Paper designs.

