

This Sewable ZIP™ LED board is part of the Kitronik Electro Fashion range. It incorporates a single colour addressable ZIP™ LED, which can be connected to a suitable processor capable of driving the LED chip (e.g. the BBC micro:bit).

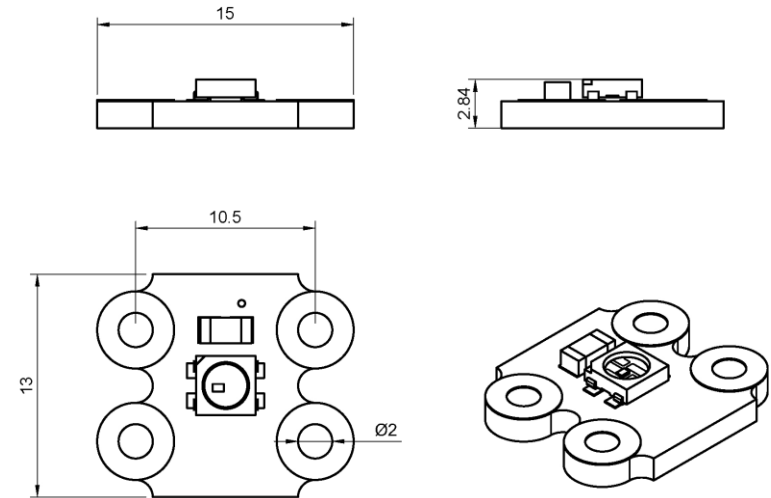
The board has four external connections: +V supply voltage, GND, Data In and Data Out. Data In should be connected to the processor drive signal pin. If a string of these LEDs is being created, Data Out from one LED should connect to Data In of the next. The connection rings have been designed for use with both conductive thread (sold by Kitronik [here](#)) and crocodile clips (sold by Kitronik [here](#)).

If using a BBC micro:bit:

It is recommended that no more than 4 LEDs are powered directly from the micro:bit. If more are required, a separate power supply should be used (note that a level shift will be needed for the data signal if the power supply is greater than 3.3V).

Examples: The Sewable ZIP™ LED is ideal for use with the [Klip Halo](#). For more details see: <http://www.kitronik.co.uk/sewablezip>

Dimensions:



Note:

Kitronik ZIP™ LEDs are compatible with any WS2812B driver code and can be coded with the Microsoft MakeCode Editor and MicroPython.

Electrical Information

Operating Voltage (Vcc)	3.0V – 5.3V
Connections	+V (Supply Voltage), DIN (Data In), DOUT (Data Out), GND
Max Current (ZIP LED running full RGB brightness)	30.8mA (1 ZIP LED White, 100% brightness)

Caution:

ZIP™ LEDs may become hot if used at high brightness for prolonged periods.

