

Features

- Control circuit and the RGB die all in one 5050 sized device
- Grey level adjusting control (256 level grey scale)
- Red drive special control enhances colour balance
- Transmission distance between two points can be up to 10M
- Using a typical data transmission frequency of 800 Kbps, you can achieve refresh rates of 30 frames per sec

RS PRO 5.5V RGB LED

RS Stock No.: 180-8080



RS PRO Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

The RS PRO 5.5V RGB LED is an Intelligent LED with control and light emitting circuit, all contained in a 5050 sized package.

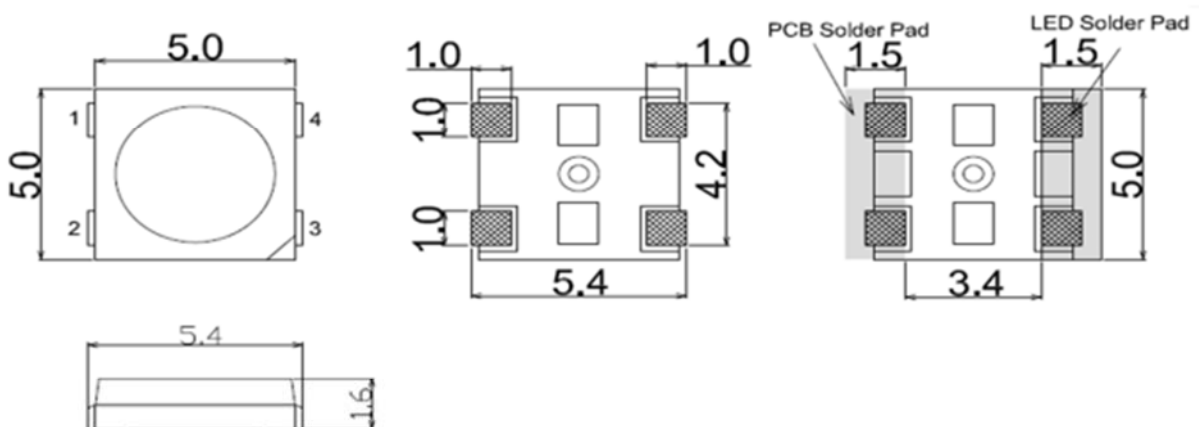
Based on the industry standard SK6182 device, the control circuit consists of signal shaping amplification, built-in constant current source, and a high precision RC oscillator.

The data protocol being used is the unipolar NRZ communication mode, where the 24-bit data is transmitted from the controller to DIN of the first LED, after an internal data latch, the remaining data is passed through the internal amplification circuit and sent out of the DO port to the remaining pixels. Using 'automatic shaping forwarding technology' means the number of cascaded LEDs is only limited by the signal transmission speed.

General Specifications

Colour	RGB
Forward Voltage	5.5V
Forward Current	20mA
Luminous Intensity	R: 700 ~ 1,000 mcd / G: 2,200 ~ 3,300 mcd / B: 1,000 ~ 1,500 mcd
Dimensions	5 mm (L) x 5 mm (W) x 1.6 mm (H)
Number of LEDs	3
Number of Pins	4
Mounting Type	Surface Mount

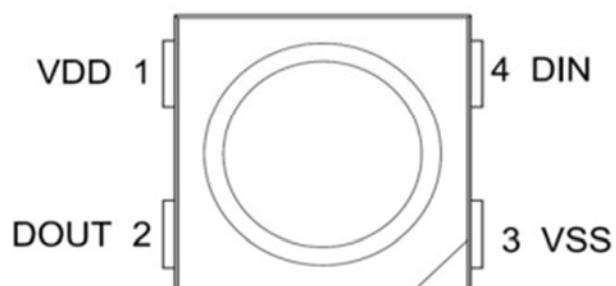
Technical Drawing (mm)



Notes:

- All dimensions are in millimeters.
- Tolerance is ± 0.1 mm unless otherwise noted

PIN configuration



No.	Symbol	Function Description
1	VDD	Power supply LED
2	DOUT	Control data signal output
3	VSS	Ground
4	DIN	Control data signal input