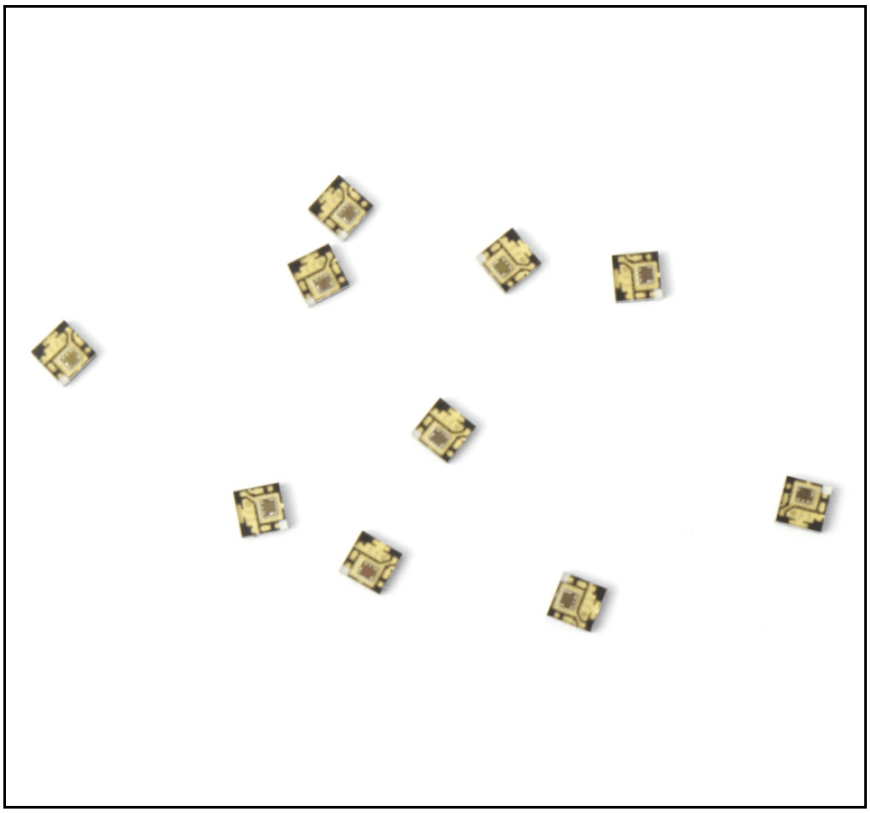
Features

- Control circuit and the RGB die all in one 2mm squared 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 6V RGB LED

RS Stock No.: 180-8087



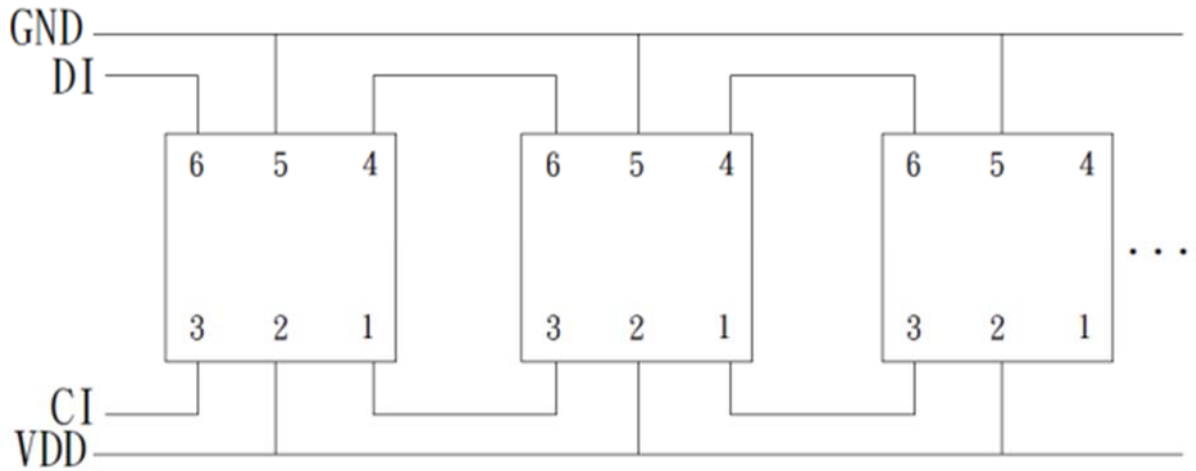
RS PRO Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

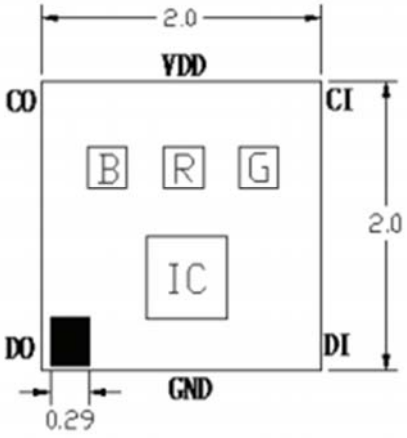
The RS PRO 6V RGB LED is an Intelligent LED with control and light emitting circuit, all contained in a 2mm square sized package.
Based on the industry standard APA102-2020 device, the control circuit consists of signal shaping amplification, built-in constant current source, and a high precision RC 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.
This is the industry standard 6 pin configuration. There are some other versions based on 8 pins and these devices are not compatible.

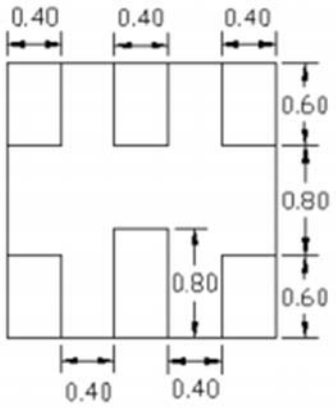
General Specifications

Colour	RGB
Millicandela	R 300-330 mcd / G 420-460 mcd / B 160-180 mcd
Refresh Rate	400 cycle
Applied Voltage	5VDC
Power Consumption	0.1W (MAX: 0.5W)
View Angle	160˚
Weight	0.025 g
Dimensions	2 mm (L) x 2 mm (W) x 0.9 mm (H)
Operating Temperature	-40˚C ~ 70˚C
Mounting Type	Surface Mount



Technical Drawing





Pin Configuration