

## LED 5050 RGB

3 LEDs Red, Green, Blue in single package. Can create any Color Light from it. Common Cathode or Common Anode

These surface-mount LEDs are an easy way to add a lot of colorful dots to your project. They're similar to the ones found in digital RGB LED strips. They are half a centimeter on a side, which makes them small but not so small that they are impossible to hand solder. There are three LEDs inside, red green and blue and because they are so close together, they mix very nicely, without the need for a diffuser. The LED is quite bright.

| Volume (MM) | Brightness ( <br> MCD ) | Voltage (V) | Current (MA) | Band (NM) |
| :--- | :--- | :--- | :--- | :--- |
| $5050\left(5.0^{*}\right.$ <br> $5.0)$ | R: 250-350 | R: 2.0-2.2v | 20 | R: $620-625$ |
| G: 700-1000 | G: 3.0-3.2v |  | G: 520-525 |  |
| B: 200-300 | B: 3.0-3.2v |  | B: 465-470 |  |



Notes:
NI dimensions in mm tolerance is $\boldsymbol{m}^{2} 0.1 \mathrm{~mm}$ unless otherwise noted.


## Calculating Series Resistance for each LED

Since voltage drop is different for each LED in the package, Different series resistance will be required.

Practically tested below for Each LED in the package. Recommend resistor values for 5 V operation

| LED | 5V Operation Series Resistor | Current |
| :--- | :--- | :--- |
| RED | 220 R | 13.7 mA |
| GREEN | 150 R | 13.3 mA |
| BLUE | 150 R | 13.5 mA |

You can use this LED Calculator to get the value. Good operating current is 15 mA each.

