

## DotStar Micro LEDs (APA102-2020) - Smart SMD RGB LED - 10 pack

PRODUCT ID: 3341

IN STOCK

1

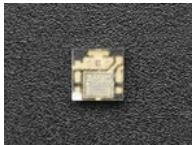
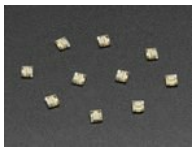
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[DESCRIPTION](#)[TECHNICAL DETAILS](#)

## DESCRIPTION

These *incredibly small* surface-mount LEDs are an easy way to add a lot of very tiny (but bright!) colorful dots to your project. They're mini versions of the ones in our digital DotStar strips and

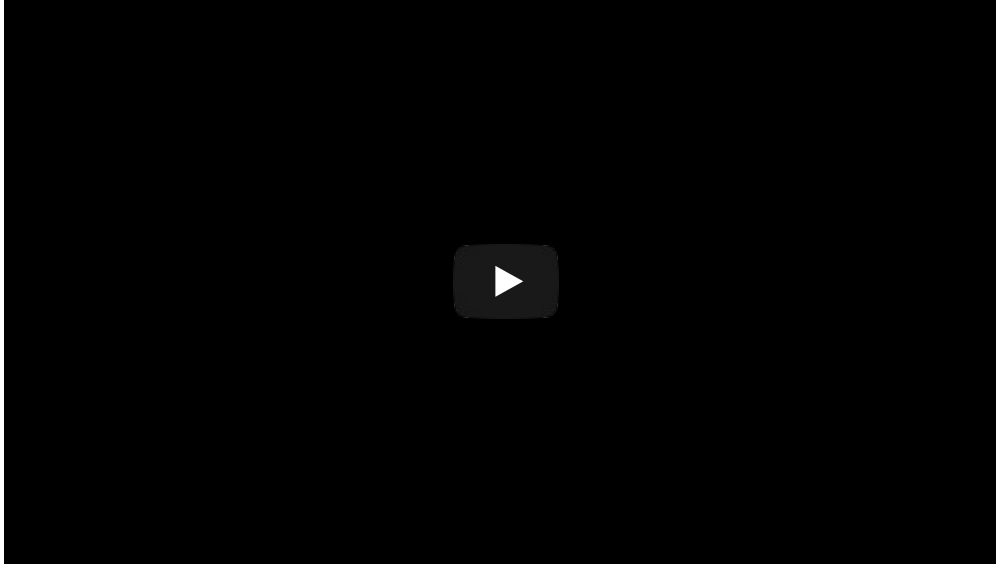
Downloaded from [Arrow.com](https://www.arrow.com), these tiny LEDs are just mind-bogglingly small. They are a mere

**2mm x 2mm** (way smaller than [APA102-5050-RGB](#)), which makes them pretty darn tiny so they might be a bit difficult to hand solder. SMT techniques with solder paste and hot air will work best here.

There are three LEDs inside, red green and blue. The RGB LEDs are controlled by a tiny chip that takes a 24-bit color level via the clock and data in and then does all the PWM control for you. So you just 'set' the color data once. Like DotStars (and the similar NeoPixels) you can chain them together, the output of one leading into the input of another for near-infinitely long strips.

Comes in a strip of 10 pieces.

Please note this is a surface mount part! It is possible to solder thin wires to the pads but its designed for use on a SMD PCB. If you are not comfortable with hand soldering SMD parts, [check out our other RGB LEDs such as the thru-hole ones or in pixels/strips.](#)



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## TECHNICAL DETAILS

- Red color: 620-625 nm
- Green color: 520-525 nm
- Blue color: 465-470 nm
- Red brightness @ ~20mA: 600-800 mcd
- Blue brightness @ ~20mA: 800-1000 mcd
- Green brightness @ ~20mA: 1500-2000mcd
- [Datasheet](#)

### Revision History:

- **As of May 21, 2018** we have updated to use a new version of the APA102-2020 LEDs with a *different brightness curve* - you may notice the LEDs are dimmer (but consistently so). Please update any firmware you have written to have brightness increased!



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## LEARN

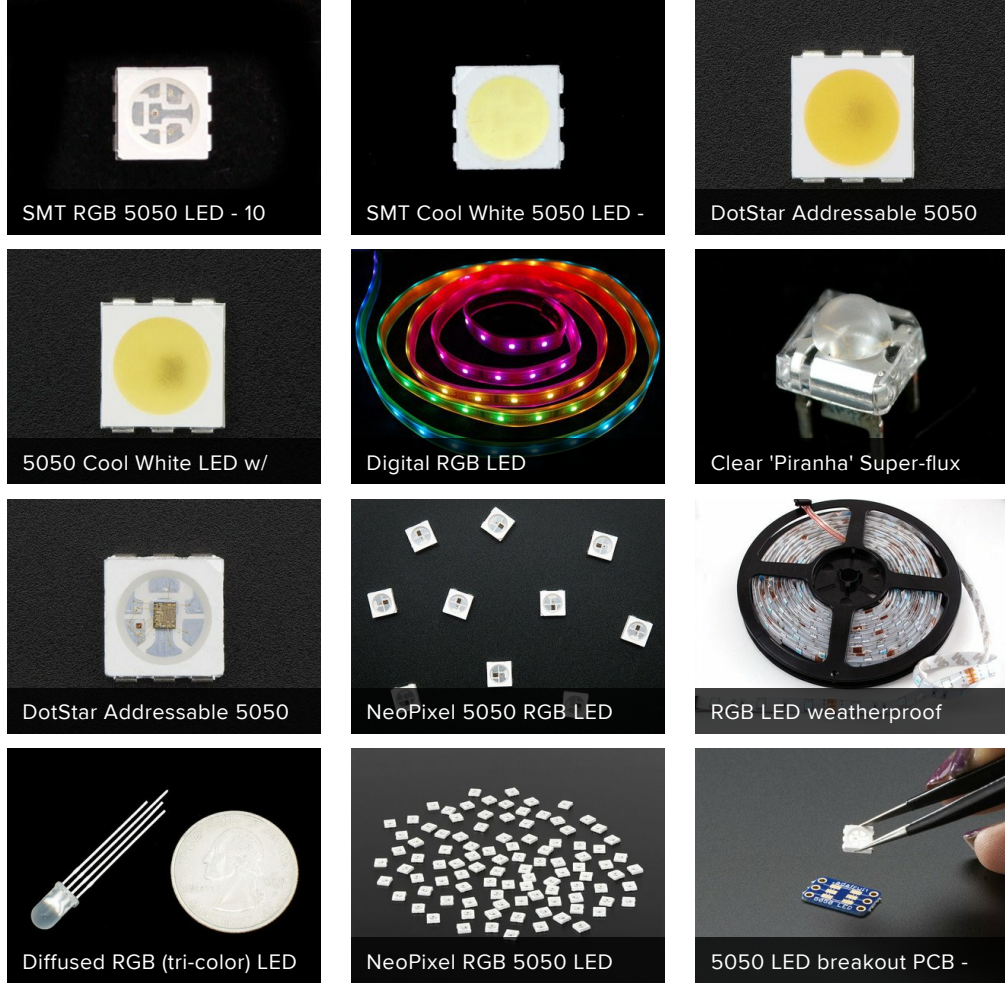


### [Adafruit DotStar LEDs](#)

Imagine NeoPixels with a double shot of espresso...

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SMT Cool White 5050 LED -

DotStar Addressable 5050

5050 Cool White LED w/

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RGB LED weatherproof

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