

Marktech Optoelectronics Releases New Green and Red Dot LEDs – Just in Time for the Holidays

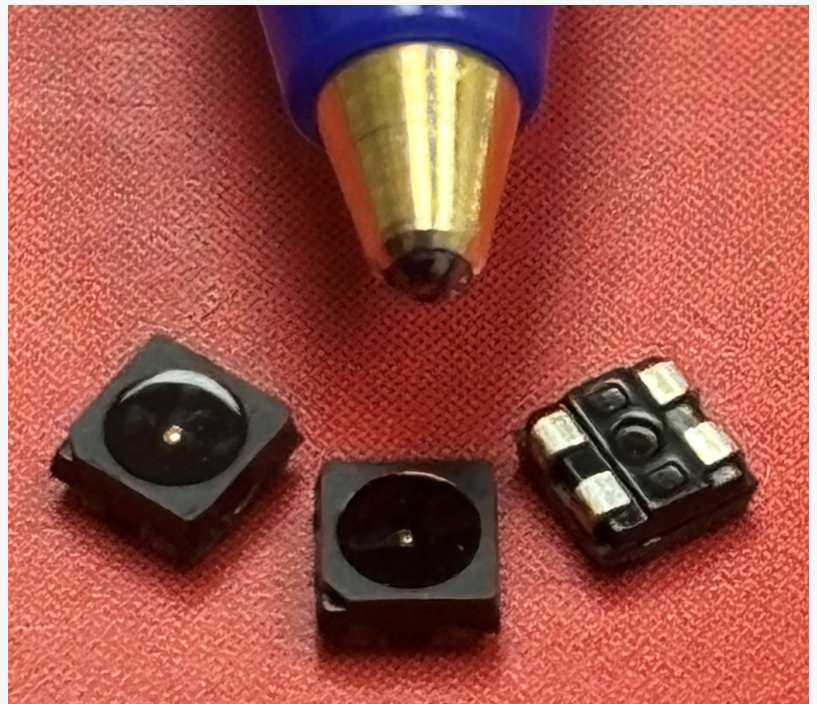
Marktech Expands Point Source LED offering with New Standard 25µm and 50µm High Sharpness Green Dot LEDs and an Expanded Range of Red Dot LEDs

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/EINPresswire.com/ -- Marktech Optoelectronics, Inc.

(www.marktechopto.com) (Marktech), a privately-held leading designer and manufacturer of standard and custom optoelectronics, including UV, visible, near-infrared (NIR), and short-wavelength infrared (SWIR) emitters, detectors, InP epi wafers, and other compound semiconductors, today announced the release of their enhanced sharpness 25 and 50 micron [green dot point source LEDs](#) for reflex sights, riflescopes, sports optics, camera viewfinders, and other aiming applications. In addition, Marktech expanded their offering of red dot LEDs with additional micron sizes and package types.

Our green dot LEDs utilize a “true green” 520nm wavelength, which appears brighter to the human eye than a 650nm red point source with equivalent power output. Green dots appear “brighter” because the rod receptors in the human eye respond more to 520nm green light than 650 red light. However, red dots are still desirable in many applications. For instance, if the background, foliage, or target is a similar shade of green, then a red dot might be a better option.



Marktech's 2.1mm x 2.1mm package for dot or point source LEDs



Marktech's red dot-circle-cross reticle LED with individually addressable elements.

Standard red dot LEDs micron sizes include 25 μm , 50 μm , 80 μm , 100 μm , and 150 μm . Red dot LEDs with micron sizes of 10 μm , 13 μm , 30 μm , 40 μm , and 60 μm available on a custom basis. Our standard red dot LEDs are available in two package types: a 2.1x2.1 SMD Flat Lens and a 1.6x1.5 SMD Flat Lens. Several additional package type options are available such as chip on board (COB) and flex circuit. Marktech can also custom design package for OEM needs.



Marktech Optoelectronics a Leading Manufacturer of Photodiode Photodetectors and LED Emitters in UV, Visible, NIR, SWIR Wavelengths

Marktech has developed improved manufacturing processes to increase the throughput and improve the quality of our green and [red dot LED](#) products. In addition, Marktech can rapidly fulfill orders of our standard red dot point source products from our U.S. factory. Customized red dot, green dot, and reticle LEDs require additional time for development, design approval, raw material procurement, and production.



We are proud to offer what we believe are the best green and red dot or point source LEDs in the market. We strive to ensure that every part has the highest clarity, brightness, and durability."

*Vincent Forte, Chief
Technology Officer (CTO) at
Marktech Optoelectronics*

Our Point Source LEDs Undergo 100% Quality Inspection

All Marktech red dot LEDs are 100% inspected for internal reflections, defects, and sharpness. As a result, we believe Marktech Optoelectronics makes the sharpest aiming dots in the industry with unrivaled clarity and minimal to zero internal reflections. In addition, the lower power draw of our red dot LEDs dramatically increases battery life.

The high-quality performance of Marktech's red dot LED products is the result of several factors:

1. Our proprietary packaging and assembly processes use state-of-the-art manufacturing equipment
2. Our proprietary black encapsulation process has virtually eliminated any unwanted reflections resulting in ultra-clear patterns.
3. Our high luminosity, energy-efficient point source or dot LEDs provide low power consumption for extended battery life.
4. 100% Quality Inspection of Green and Red Dot LED

Marktech has combined crosshair segments, red dots, and 7-segment numeric or alphanumeric displays to produce special reticles for optical scope OEMs. In addition, we have designed illuminated reticles or monolithic LEDs to have the segment and dot independently driven in

some custom OEM applications, which is unique in the industry.

Marktech can assemble the red dot or reticle die into various standard and custom packages as well as chip-on-board (COB), rigid PCB, and flexible circuit assemblies. We have also incorporated our avalanche photodiode (APD) detectors in conjunction with red dot and display reticles for riflescopes, binoculars, LIDAR speed guns, and rangefinders with laser distance, speed, or range measurement capabilities.

Red dot, reticle, and alphanumeric LEDs benefit a wide range of applications, including:

- Riflescopes
- Reflex Sights and Red Dot Sights
- Illuminated Reticle Scopes
- LIDAR Speed Guns
- Optical pyrometers
- Telescope Finderscopes or Red Dot Finders
- Night Vision (NV) Devices
- Rangefinders & Range-finding Binoculars
- Camera Red Dot Viewfinders
- Stage Lights and Spot Lights
- Ocular Displays in Microscopes and Medical Optics
- Displays in Smart Glasses, Goggles, and AR/VR Devices
- Head-mounted display in scuba masks and helmets
- Optical encoders
- Edge sensors
- Proprietary OEM Optical Assemblies.

The full version of this article is available here:

<https://marktechopto.com/marktech-optoelectronics-releases-new-green-and-red-dot-leds-just-in-time-for-the-holidays/>

Consult with Us Today About Your Design Project

Our green dot, red dot and [reticle LED](#) experts can tailor existing or design new products to accurately meet the performance specifications of riflescopes, gun sights, laser speed guns, camera viewfinders, finderscopes, and aiming products under design or redesign.

If you have specific technical or application questions regarding your design project requiring red dot point sources or illuminated reticles or are just interested in learning more about Marktech's red dot LED and reticle LEDs, then please reach out to us through the following:

- Contact our application engineers: info@marktechopto.com
- Request for information (RFI) or request for quote (RFQ) form: Contact Us
- To discuss your development project, contact:

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