

Press Information

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New LUXEON H LED simplifies design of space constrained lighting solutions such as retrofit bulbs

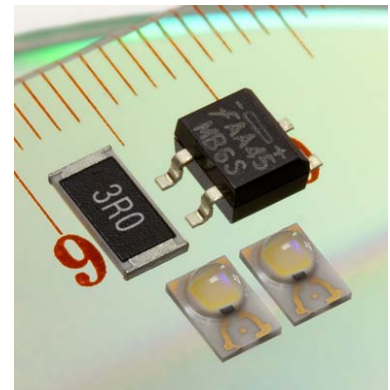
High voltage LED uses rectified AC and eliminates need for DC electronic driver

San Jose, CA — Philips Lumileds, a LED technology and market leader, continues to expand its LUXEON LED portfolio with its first high voltage emitter, LUXEON H. The new emitters are driven directly with rectified AC voltage rather than constant DC current. This high voltage architecture maximizes space for additional thermal management, permitting an increase in the thermal limit for even the smallest bulbs. The 50 Volt LUXEON H flexibly supports both 110V and 240V solutions.

Designed to meet the demands of space constrained retrofit bulbs, [LUXEON H](#) emitters deliver industry leading thermal performance and reliability as well as high quality, warm white light. Two color temperatures are available, 2700K and 3000K, with typical CRIs of 83. Typical flux is 84 lumens and 90 lumens respectively for the two correlated color temperatures. The new LUXEON H emitters are identical in footprint to the compact LUXEON Rebel and LUXEON Rebel ES LEDs further simplifying implementation.

“Our thin film flip chip technology allows us to continue to develop innovative solutions, like the multijunction die in LUXEON H, for the illumination market,” said Frank Harder, VP of Product Marketing for LUXEON. “The base of some bulbs is so small that it’s impossible to fit both an electronic driver and a heatsink in the space. LUXEON H only requires a bridge rectifier and a resistor, both of which are very small, and the remaining space can be used for thermal management. And, because we don’t use direct red die like most other HV solutions, LUXEON H offers consistent, stable color from the instant the LED is powered and maintains its color through its lifetime.”

Initial uses of LUXEON H are expected in the retrofit bulb market where form factors for the bulbs are already defined and space is at a premium—especially so for the smallest bulb types ranging from the candelabra to the intermediate Edison, E10-E17 types. Philips Lumileds expects new solutions using LUXEON H to come to market during the second quarter of the year.



LUXEON H LEDs and the electronic components required for a system.



LUXEON H is in volume production and is available with standard lead times from [Future Lighting Solutions](#). More information can be found at both [Philips Lumileds'](#) website from Future Lighting Solutions or by contacting a local account manager.

Philips Lumileds continues to expand its LUXEON portfolio for the illumination market. LUXEON H joins the recently released LUXEON S, the first product with *Freedom From Binning*, and LUXEON Rebel and LUXEON Rebel ES, the most widely used power LEDs, to form a complete offering to the lighting community.

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About Philips Lumileds

Philips Lumileds is the world's leading provider of power LEDs for illumination solutions. The company's leading light output, efficacy and thermal management are direct results of the ongoing commitment to advancing solid-state lighting technology and enabling lighting solutions that are more environmentally friendly, help reduce CO₂ emissions and reduce the need for power plant expansion. Philips Lumileds' LUXEON LEDs are enabling new solutions for shop, outdoor, office, school, and home lighting applications. More information about the company's LUXEON LED products and solid-state lighting technologies can be found at www.philipslumileds.com.

About Royal Philips Electronics

Royal Philips Electronics of the Netherlands (NYSE: PHG, AEX: PHI) is a diversified health and well-being company, focused on improving people's lives through timely innovations. As a world leader in healthcare, lifestyle and lighting, Philips integrates technologies and design into people-centric solutions, based on fundamental customer insights and the brand promise of "sense and simplicity". Headquartered in the Netherlands, Philips employs 119,000 employees in more than 60 countries worldwide. With sales of EUR 25.4 billion in 2010, the company is a market leader in cardiac care, acute care and home healthcare, energy efficient lighting solutions and new lighting applications, as well as lifestyle products for personal well-being and pleasure with strong leadership positions in flat TV, male shaving and grooming, portable entertainment and oral healthcare. News from Philips is located at www.philips.com/newscenter.