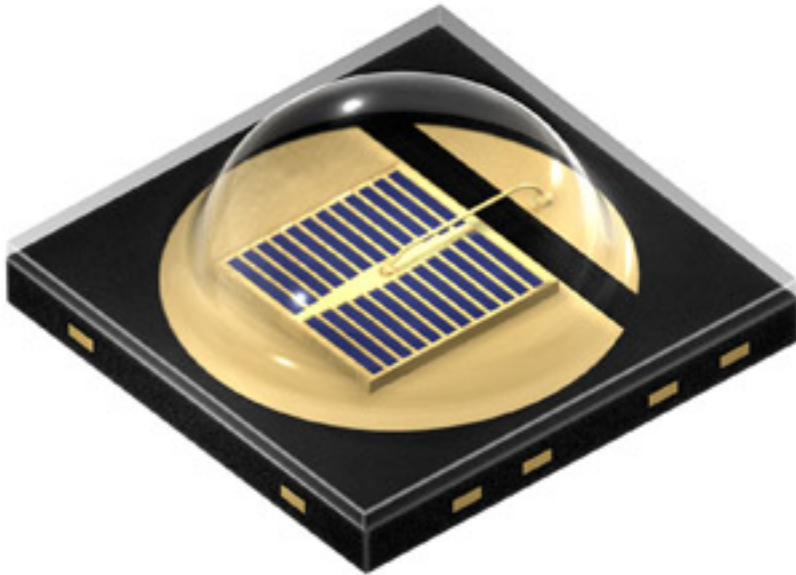


Compact IRED ideal for gesture detection



The new infrared (IRED) Oslon black SFH 4716S from Osram Opto Semiconductors is one of the most powerful IREDs on the market, with an optical output of 1030 milliwatts (mW) and a beam angle of 150 degrees. It offers perfect illumination at a range of a few yards/meters and is ideal for gesture detection systems linked to computer games or for optical safety systems in the automotive sector. And with external optics and tight focusing, even distant objects can be perfectly illuminated with infrared light.

The new Oslon black is the ideal solution wherever gesture detection is involved. This high-power IRED illuminates the relevant area so that a camera sensor can detect movement, which will then be used to control a computer or enter text. The wide beam angle of 150 degrees ensures that the near-field area is uniformly illuminated and gestures are reliably detected. Text can therefore be entered, for example, even if the hand is a few centimeters away from the keyboard. The SFH 4716S is also certified in accordance with the automotive standard AEC-Q101 so it can be used in safety-related applications such as driver monitoring or seat occupancy detection systems.

Its high optical output of 1030 mW is achieved at an operating current of 1 amp (A) with an efficiency of around 35 percent. This increased performance is based on the stack technology used by Osram that provides each chip with two emission centers, thereby doubling its output. Oslon black achieves a radiant intensity of up to 225 mW/sr (milliwatts per steradian). It indicates the light output within a solid angle segment and defines the intensity of the light beam. The emitted light with a wavelength of 850 nm is suitable for camera sensors but is barely visible to the

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Published on Electronic Component News (<http://www.ecnmag.com>)

human eye so it is not considered an annoyance.

Perfect for external optics and long ranges

The high optical output of the Oslon black also makes it suitable for combining with external reflectors. It may initially seem contradictory to create a narrow beam from a wide-angle light source, but in fact this is a very efficient way to achieve high radiant intensity and long ranges. The light from the SFH 4716S injects very well into an external reflector. The reflector shapes the beam so that it can be tightly focused by an additional lens. This makes it suitable for surveillance and monitoring systems that operate with additional infrared illumination. "With the aid of external reflectors it is possible to produce very narrow beam angles and illuminate at distances of several hundred yards, or meters," said Dr. Amine Taleb-Bendiab, Senior Product Marketing Manager- IR Products.

www.osram-os.com [1]

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