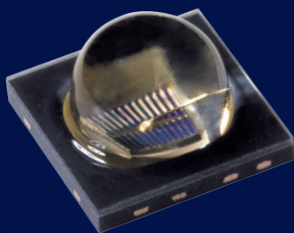




IR OSOLON® Black Series Family

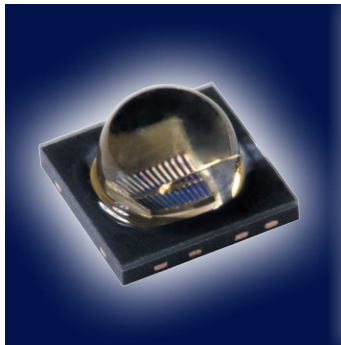
Compact arrangements with outstanding optical power

The IR OSOLON® Black Series of OSRAM Opto Semiconductors is today's smallest infrared LED with more than one watt of optical power. The small package with integrated lens allows superior compact arrangements of very high power density. The IR OSOLON® Black Series is perfect for applications like CCTV, machine vision, night vision or number plate recognition systems.



OSRAM
Opto Semiconductors

IR OSOLON® Black Series Family



SFH 4715S



Surveillance System



Night Vision

Advantages

Stacked power

With the IR OSOLON® Black Series, OSRAM Opto Semiconductors expands its position in the field of infrared illumination and complements its range of products with an additional power class. By using the Nanostack™ chip technology, the typical optical power reaches 1070 mW at an operating current of 1 A.

Compact package

Thanks to its adapted outcoupling lens with +/- 45° emission angle, the IR OSOLON® delivers 15 percent more output power than components without lens. The temperature-stable, small package allows compact arrangements for a very high power density.

Long lifetime

The IR OSOLON® Black Series is the perfect combination of the latest chip technology and an excellent package. Lifetimes of up to 50,000 hours are easily obtainable, even at high drive currents.

Features

- IR lightsource with high efficiency
- Very compact SMT package with integrated lens (3.75 x 3.75 x 2.29 mm), for dense clustering
- Low thermal resistance (typ. 6.5 K/W)
- Suitable wavelength for CMOS/CCD camera solutions
- Superior corrosion robustness
- Available with Nanostack™ Technology (SFH 4715S)
- Automotive qualified

Applications

- Surveillance systems, CCTV
 - Machine vision systems
 - Traffic: number plate recognition, toll systems
 - Biometrics for access control and identification
 - Night vision systems
 - Touch screens
- And wherever a high power IR lightsource is required.

Technical data

SFH 4715

SMT package
Size (W x L x H): 3.75 x 3.75 x 2.29 mm
Max. forward current (DC mode): 1 A
Thermal resistance: Typ. 6.5 K/W
Radiant intensity: Typ. 280 mW/sr
Total radiant flux (@ I_F = 1A): 600 mW
Forward voltage: Typ. 1.5 V, max. 1.8 V
Viewing angle: +/- 45°
Wavelength: 850 nm
Active chip area: 1 mm²

SFH 4715S

SMT package
Size (W x L x H): 3.75 x 3.75 x 2.29 mm
Max. forward current (DC mode): 1 A
Thermal resistance: Typ. 6.5 K/W
Radiant intensity: Typ. 500 mW/sr
Total radiant flux (@ I_F = 1A): 1070 mW
Forward voltage: Typ. 3 V, max. 3.4 V
Viewing angle: +/- 45°
Wavelength: 850 nm
Active chip area: 1 mm²

IR OSOLON® Black Series Family on the Internet:

www.osram-os.com/ir-oslon

For further information on the available products, please visit our product catalog at <http://catalog.osram-os.com>

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