

Light is competitive

The new DURIS<sup>®</sup> S 2

More lumens per dollar: small, powerful, durable

Light is OSRAM

**OSRAM**  
Opto Semiconductors

# Saving space, cutting costs

OSRAM Opto Semiconductors' new DURIS® S 2 combines small package size and high efficacy with excellent color uniformity and color stability while providing improved durability and impressive reliability. These tiny power packs offer manufacturers and designers great new opportunities for both innovative and competitive space and cost saving interior general lighting design, especially for linear lighting and fluorescent tube replacement.

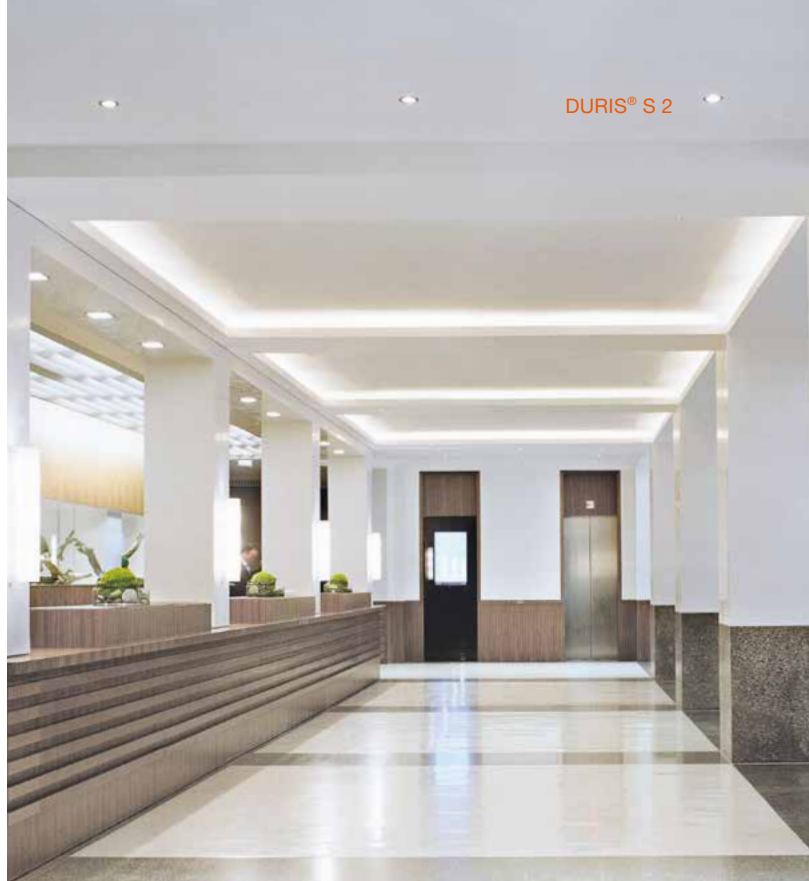


## Advantages

**DURIS® S 2: CSP (chip sized package) like improved light distribution, long lifetime**

Thanks to its 150 degrees radiation angle and 30–35 lm package, the new DURIS® S 2 is perfect to reduce the number of LEDs used in tube lighting. Compared to LEDs with classic package the chip size LED emits more light sideways. According to this the light distribution in light tubes becomes more homogeneous and so-called hot spots, clearly visible light spots, are reduced. The long lifetime at 0.2 W applications is especially fitted for linear lighting and fluorescent tube replacement, but its overdriving capability to 150 mA makes DURIS® S 2 also an ideal choice for other indoor applications like retrofits and down lights. However, DURIS® S 2 does not only outclass its competitors with power and versatility: The new EMC (epoxy molding compound) lead frame material also provides far better lifetime and reliability performance over traditional PPA and PCT material.



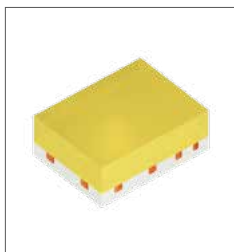


**Features**

- Luminous flux typ. 30 lm @ 4,000 K, 65mA, 25 °C
- High efficacy of typ. 175 lm/W @ 4,000K, CRI min. 80, 65 mA
- Typ. CRI 85, min. CRI 80
- Viewing angle of 150° ideal for homogenous linear light distribution
- Small footprint of 2.0 mm × 1.6 mm
- New 2016 EMC lead frame material
- Excellent color uniformity and stability
- Color: 2,700–6,500 K (White)
- Over-driving capability to 150 mA
- Bigger pitch between LED on tube light applications – can reduce number of chips and avoid hot-spot effect
- Smaller package size – can save space and save soldering cost
- lm/\$ competitive for professional lighting applications

**Applications:**

- Indoor general lighting
- Linear lighting/fluorescent replacement tube
- Troffer/Panel light
- Retrofit and Fixture
- Shop lighting
- Task light



**DURIS® S 2**

Type	Typ. R <sub>th JS el</sub> (K/W)	Available CCT range (K)	CRI min.	Typ. Luminous flux (lm)	Typ. Efficacy (lm/W)	Max. Current (mA)	Typ. Binning temperature (°C)	Typ. Voltage (V)	Binning CCT (K)
GW SBLMA2.EM	24	2,700–6,500	80	33	176	150	25	2.9	4,000
GW SBLMA3.EM	24	2,700–6,500	80	33.5	178	150	25	2.9	4,000



**DURIS® S 2 on the Internet:**  
[www.osram-os.com/duris-s2](http://www.osram-os.com/duris-s2)

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

More information about LED in General Lighting:

**LED Light Site**  
[ledlight.osram-os.com](http://ledlight.osram-os.com)

**LED Light for you Network**  
[www.ledlightforyou.com](http://www.ledlightforyou.com)



**Asia**

OSRAM Opto Semiconductors  
(China) Co.,Ltd.  
28/F Harbour Ring Plaza  
No. 18 Xi Zang Middle Road  
Shanghai 200001  
P.R. China  
E-mail: [prasia@osram-os.com](mailto:prasia@osram-os.com)

**Europe**

OSRAM Opto Semiconductors GmbH  
Leibnizstraße 4  
D-93055 Regensburg, Germany  
Phone: +49 941 850 1700  
Fax: +49 941 850 3302  
E-mail: [support@osram-os.com](mailto:support@osram-os.com)

**USA**

OSRAM Opto Semiconductors Inc.  
1150 Kifer Road, Suite 100  
Sunnyvale, CA 94086, USA  
Main Phone number: (408) 962-3700  
Main Fax: (408) 738-9120  
Inbound Toll Free: (866) 993-5211  
E-mail: [info@osram-os.com](mailto:info@osram-os.com)

