



Light is reliable

DURIS[®] P

The best choice for professional outdoor lighting applications

Light is OSRAM

OSRAM
Opto Semiconductors

Top quality, leading-edge technology and high reliability

OSRAM Opto Semiconductors' new high and ultra high power LEDs provide versatile opportunities for high-quality and cost-efficient outdoor lighting.

Advantages

Until now, costly ceramic-based LEDs are used for professional exterior lighting applications. With the DURIS® P series OSRAM Opto Semiconductors is now offering epoxy-based packages that generally provide superior lumen/\$. In addition, the new DURIS® P high-power and ultra-high-power LEDs grant uncompromising reliability and performance. To achieve this, we have transferred our special automotive experience in combining competitive lead frame technology and high-power chips in the field of high volume products for General Lighting.

Features:

- Cheaper alternative to ceramic packages, higher lumen/\$
- Best in class 2nd board reliability compared to ceramic packages
- Key parameters binned at 85 °C
- Superior robustness and long lifetime
- Color distribution limited to 5 steps maximum (McAdam)

Powerful LEDs for street lighting applications



DURIS® P 8

- Higher lumen/\$
- Cheaper alternative to well known ceramic packages
- Long lifetime
- Small size (3.7 × 3.7 mm)

DURIS® P 9

- Maximum light output at minimized package size
- Enables very compact luminaire designs
- Small size (3.7 × 3.7 mm)

DURIS® P 10

- Enables significant reduction in system costs
- Reconciliation of thermal behavior and best in class 2nd board reliability
- A broad choice of lens for secondary optics is readily available on the market
- 7.0 × 7.0 mm package

Applications

- Professional outdoor lighting (street- and tunnel lighting)
- Industrial luminaires (high bay, low bay)



High quality outdoor lighting for residential applications



Professional outdoor lighting in public spaces

**DURIS® P**

Type	Color	Available CCT range (K)	CRI min.	CRI typ.	Typ. Luminous flux (lm)	Typ. Forward Voltage V_f (V)	Typ. Binning temperature (°C)	Binning CCT (K)	Viewing angle at 50 % I_v	Footprint (mm)
DURIS® P 8										
GW PUSRA1.PM	white	3,000 – 6,500	70	72	290	2.8	85	5,000	120°	3.7 × 3.7
DURIS® P 9										
GW PUSTA1.PM	white	3,000 – 6,500	70	72	450	3.0	85	5,000	120°	3.7 × 3.7
DURIS® P 10										
GW P7STA1.PM	white	3,000 – 6,500	70	72	1,100	11.2	85	5,000	120°	7.0 × 7.0
GW P7STA2.PM	white	3,000 – 6,500	70	72	1,100	5.6	85	5,000	120°	7.0 × 7.0

■ Upcoming product

For more technical values, please visit our product pages www.osram-os.com



DURIS® P Family on the Internet:
www.osram-os.com/duris-p

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



LED Light for you Network
www.ledlightforyou.com

Asia

OSRAM Opto Semiconductors
(China) Co., Ltd.
29/F., Harbour Ring Plaza
No.18 Xizang (M.) Road
Shanghai
P.R. China 200001
E-mail: 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

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