



# Light is versatile The new DURIS<sup>®</sup> S 5 portfolio

All white and full color



Light is OSRAM

## DURIS<sup>®</sup> S 5 has it all: various white and color versions

The further improved and expanded new DURIS<sup>®</sup> S5 family consists of various white and now also colored medium power LEDs with compact dimensions and excellent efficiency, offering manufacturers and designers even more versatility and flexibility.

## DURIS<sup>®</sup> S5 white: now even better

DURIS<sup>®</sup> S5 white provides flexibility in forward voltage and luminous flux with high lifetime even at high temperature. New phosphor, new lead frame and an upgrade of the chip lift the LEDs to a new level of performance.

## Applications

- Retrofit (omnidirectional, directional, linear)
- Home (pendant lighting, strip lighting, spotlight)
- Shop (spotlight, downlight, linear lighting, freezer/display, shelf lighting)
- Office (downlight, linear/area lighting)
- Architainment and hospitality (accent/mood lighting, cove lighting, strip lighting)
- Industrial (portable lighting, emergency lighting, high/low bay, linear lighting)

### **Features**

- Various luminous flux packages from one package family
- Small footprint (3 mm × 3 mm) for clustering
- Higher lifetime than PPA packages
- Compact light source in white SMT package, colored diffused silicone resin
- Viewing angle at 50 % Iv: 120°
- Optimized driver efficiency and costs due to higher voltage option
- Full range of color temperatures: 2,700K-6,500K (white)
- Test results according IESNA LM-80 available
- Excellent color reproduction with CRI min. 70, 80 and 90
- LM-80 report available

#### DURIS® S 5 white

Typ. R <sub>th JS el</sub> (K/W)	ССТ (К)	CRI min.	CRI typ.	Typ. Luminous flux (Im)	Typ. Efficacy (Im/W)	Max. Current (mA)	Typ. Binning current (mA)	Typ. Binning voltage (V)
25	2700-4000	90	93	22	115	240	65	2.95
25	2700-6500	80	83	27	141	240	65	2.95
30	2700-6500	80	83	31	122	180	80	3.20
11	2700-4000	90	93	90	97	240	150	6.2
11	2700-6500	80	83	118	127	240	150	6.2
11	2700-4000	90	93	103	112	200	150	6.15
11	2700-6500	80	83	123	133	200	150	6.15
11	4000-6500	70	73	138	150	200	150	6.15
11	2700-4000	90	93	94	101	200	150	6.2
11	2700-6500	80	83	121	131	200	150	6.2
11	2700-6500	90	93	40	117	400	120	2.85
11	2700-6500	80	83	54	157	400	120	2.85
20	2700-4000	90	93	22	118	200	65	2.9
20	2700-6500	80	83	28	151	200	65	2.9
	R <sub>th.JS.el</sub> 25           25           30           11           11           11           11           11           11           11           11           11           11           11           11           20	R <sub>m-JS el</sub> Control (K/W)           25         2700-4000           25         2700-6500           30         2700-6500           11         2700-6500           11         2700-6500           11         2700-6500           11         2700-6500           11         2700-6500           11         2700-6500           11         2700-6500           11         2700-6500           11         2700-6500           11         2700-6500           11         2700-6500           11         2700-6500           11         2700-6500           20         2700-4000	R         H         JS el           25         2700–4000         90           25         2700–6500         80           30         2700–6500         80           11         2700–6500         80           11         2700–6500         80           11         2700–6500         80           11         2700–6500         80           11         2700–6500         80           11         2700–6500         80           11         2700–6500         80           11         2700–6500         90           11         2700–6500         80           11         2700–6500         80           11         2700–6500         80           11         2700–6500         80           11         2700–6500         90           11         2700–6500         90           11         2700–6500         80           20         2700–4000         90	R         B	R         Luminous           25         2700-4000         90         93         22           25         2700-6500         80         83         27           30         2700-6500         80         83         31           11         2700-6500         80         83         31           11         2700-6500         80         83         118           11         2700-6500         80         83         118           11         2700-6500         80         83         123           11         2700-6500         80         83         123           11         4000-6500         70         73         138           11         2700-4000         90         93         94           11         2700-6500         80         83         121           11         2700-6500         90         93         40           11         2700-6500         80         83         54           20         2700-4000         90         93         22	R         Luminous         Efficacy           25         2700-4000         90         93         22         115           25         2700-6500         80         83         27         141           30         2700-6500         80         83         31         122           11         2700-6500         80         83         31         122           11         2700-6500         80         83         118         127           11         2700-6500         80         83         118         127           11         2700-6500         80         83         112         112           11         2700-6500         80         83         123         133           11         2700-6500         80         83         123         133           11         2700-6500         70         73         138         150           11         2700-6500         80         83         121         131           11         2700-6500         80         83         121         131           11         2700-6500         90         93         40         117           11	R         L <thl< th="">         L         <thl< th=""> <thl< th=""></thl<></thl<></thl<>	R H B (K/W)Luminous mEfficacy flux (lm)Current (mA)Binning current (mA)252700-400090932211524065252700-650080832714124065302700-650080833112218080112700-400090939097240150112700-65008083118127240150112700-65008083103112200150112700-65008083123133200150112700-65008083123133200150112700-65008083121131200150112700-65008083121131200150112700-6500808354157400120112700-6500808354157400120112700-6500808354157400120112700-650080835415740012012202700-400090932211820065

Binning Conditions: 3,000 K, 25 °C

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## Now also available: DURIS<sup>®</sup> S 5 color

Once again, OSRAM Opto Semiconductors offers exciting and efficient new opportunities for innovative applications and designs: DURIS<sup>®</sup> S5 is now also available in four color versions. Thanks to their extremely high color efficacy and brightness, DURIS<sup>®</sup> S5 blue and green enable less LED usage and smaller PCB design, and thus cost savings in assembly. The good brightness over temperature stability of DURIS<sup>®</sup> S5 red and amber makes less heatsink required, simplifying retrofit design.

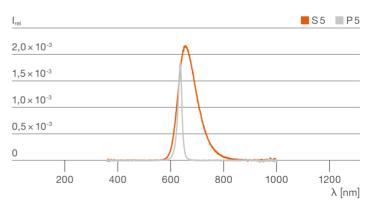
## **Features**

- Wide spectrum color solution
- Complete portfolio with industrial standard footprint of 3 mm × 3 mm
- Best in class flux with hot/cold factor (85 °C to 25 °C)
- Single channel driver solution design for all colors: red, amber, green, blue – and assisting white color
- High CRI and high R9 value for tunable white design from 1,800 K – 8,000 K with RGB solution
- Highest efficacy for green LEDs ever: 180 Im/W @ 150 mA
- Highest temperature stability for red and amber LEDs ever
- Phosphor-converted colors for amber, red and green

## **Applications**

- Smart lighting
- Stage lighting
- Color changing mood lighting designs
- High color quality tunable white retrofits
- High color quality tunable white LEDfits (RGB solution to achieve tunable white)

Wide spectrum S5 red color compared to narrow spectrum P5 red color



### **DURIS® S 5 color**

Туре	Color	Dominant wavelength (nm)	Radiant flux (mW)	Typ. V <sub>f</sub> (V)	Typ. R <sub>th JS el</sub> (K/W)	Typ. Luminous flux (Im)	Max. Current (mA)	Viewing angle	Industry standard footprint (mm)	Package
GR PSLR31.13	Red	620	_	6.25	11	22	200	120°	3.0×3.0	epoxy based
GA PSLR31.13	Amber	613	_	6.25	11	45	200	120°	3.0×3.0	epoxy based
GT PSLR31.13	Green	540		6.25	11	170	200	120°	3.0×3.0	epoxy based
GD PSLR31.13	Deep blue	450	420	6.25	11	_	200	120°	3.0×3.0	epoxy based



**DURIS® S 5 on the Internet:** www.osram-os.com/duris-s5

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

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