Exceptional lifetime performance

OSRAM Opto Semiconductors’ Golden DRAGON® products are leading performers in the LED universe. And now the star shines even brighter: The new Golden DRAGON® uses the latest Thinfilm/ThinGaN® technologies. Besides delivering the maximum possible light from the smallest of sources, this high-performance LED has an exceptionally long lifetime, giving designers and developers the means to take illumination into completely new dimensions.
Advantages

A new dimension of brightness
Dazzling bright white light with typical 75 lm @ 350 mA is emitted from a tiny surface. Due to its embedded lens the Golden DRAGON Plus offers even higher brightness and efficacy levels.

High reliability
The Golden DRAGON® is characterized by a long lifetime of up to 50,000 hours, due to excellent thermal design and silicone encapsulation.

Flexible applications
The availability of the complete color portfolio and integrated and external optics as well as the extraordinary brightness open up new possibilities for almost any lighting application.

Features

- High performance LED emitting maximum light from the smallest possible source
- Power LED: Only 1.8 mm height
- Low thermal resistance
- Meets the quality requirements of the automotive industry
- Complete color portfolio available: Red (625 nm), amber (617 nm), yellow, true green, blue, deep blue, white, warm white and ultra white
- Can be processed using standard soldering techniques
- Lead (Pb) free – RoHS compliant

Applications

Illumination & signs
- Architectural lighting and room lighting
- Design and effect illumination
- Illuminated advertising
- Emergency lighting
- Signs, channel letters
- Traffic lights
- Replacement of conventional light bulbs

Automotive
- Exterior: Daytime running light, fog light, front turn indicator
- Interior: Dome light

Communication
- Strobe light for mobile phones and digital cameras

Golden DRAGON® on Internet:
www.osram-os.com/goldendragon/

<table>
<thead>
<tr>
<th>Golden DRAGON® ThinFilm/ThinGaN®</th>
<th>Type</th>
<th>Color</th>
<th>Wavelength</th>
<th>Typ. Output/Current</th>
</tr>
</thead>
<tbody>
<tr>
<td>LR W5SM</td>
<td>Red</td>
<td>625 nm</td>
<td>43 lm @ 400 mA</td>
<td></td>
</tr>
<tr>
<td>LA W5SM</td>
<td>Amber</td>
<td>617 nm</td>
<td>53 lm @ 400 mA</td>
<td></td>
</tr>
<tr>
<td>LY W5SM</td>
<td>Yellow</td>
<td>590 nm</td>
<td>44 lm @ 400 mA</td>
<td></td>
</tr>
<tr>
<td>LT W5SM</td>
<td>True Green</td>
<td>528 nm</td>
<td>63 lm @ 350 mA</td>
<td></td>
</tr>
<tr>
<td>LB W5SM</td>
<td>Blue</td>
<td>470 nm</td>
<td>21 lm @ 350 mA</td>
<td></td>
</tr>
</tbody>
</table>

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</tr>
</thead>
<tbody>
<tr>
<td>LD W5SM</td>
<td>Deep Blue</td>
<td>455 nm</td>
<td>310 mW @ 350 mA</td>
<td></td>
</tr>
<tr>
<td>ZW W5SG</td>
<td>White</td>
<td>x/y 0.32/0.31*</td>
<td>62 lm @ 350 mA</td>
<td></td>
</tr>
<tr>
<td>LW W5SM</td>
<td>White</td>
<td>x/y 0.32/0.31*</td>
<td>62 lm @ 350 mA</td>
<td></td>
</tr>
<tr>
<td>LUW W5SM</td>
<td>Ultra White</td>
<td>x/y 0.31/0.32*</td>
<td>75 lm @ 350 mA</td>
<td></td>
</tr>
<tr>
<td>LCW W5SM</td>
<td>Warm White</td>
<td>x/y 0.42/0.40*</td>
<td>45 lm @ 350 mA</td>
<td></td>
</tr>
</tbody>
</table>

* Color coordinates acc. to CIE 1931

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