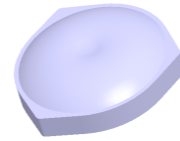


Wider Beam

Wide Lens – 3030 Series

EBH



Product Brief

Description

- The essence of our solution for panel lighting application is to have a better light distribution by applying secondary optics on top of the LED-Package. This solution is widely used in Backlighting units for TVs and monitor.

Features and Benefits

- Wider beam
- Easy to achieve a homogenous light distribution at a lower cost

Key Applications

- Flat Panel
- Ceiling
- Linear Bar
- Sign, Cabinet

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Performance Characteristics

Table 1. General Characteristics TA = 25°C , RH=30%

Characteristic	Value
Optic Material	PMMA
Color	Clear
Diameter	16.92mm
Height	5.58mm
Operating Temperature	-10°C ~ 85°C
Storage Temperature	-40°C ~ 85°C
Viewing Angle	150
Optical Efficiency	97 %

Note

- 1) In this design guide we use our 3030 LED in combination with a dedicated lens.
- 2) All measurements were made under the standardized environment of Seoul Semiconductor.

Performance Characteristics

Fig1. Relative Luminous Distribution, $T_a=25$

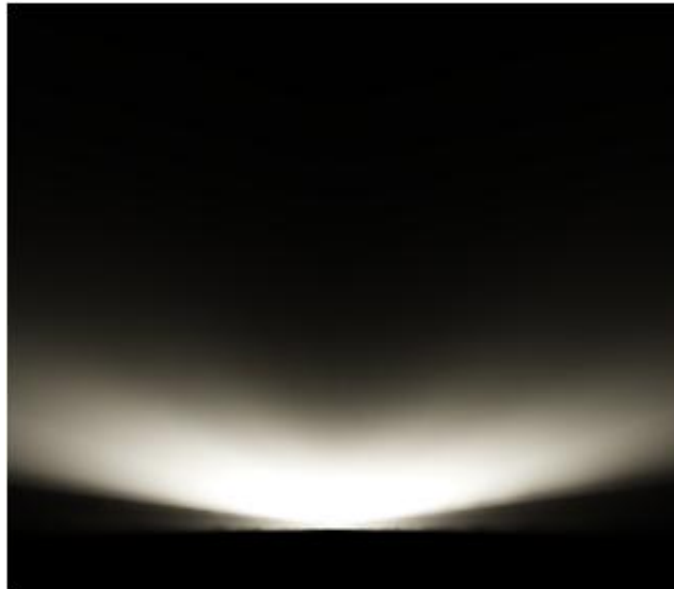
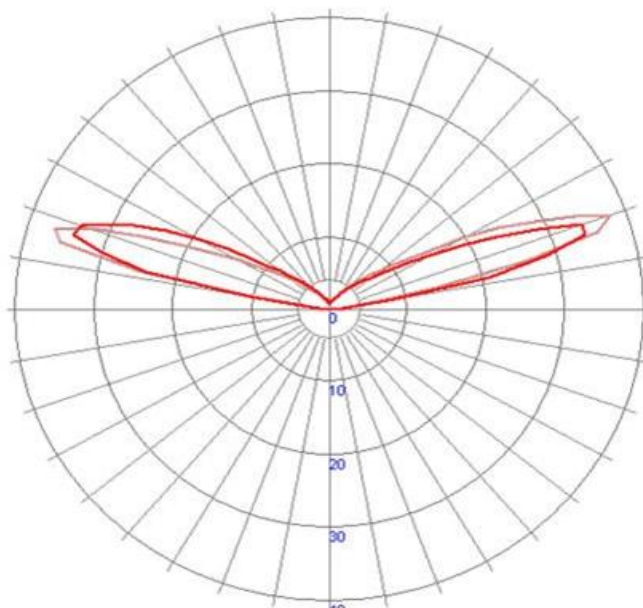


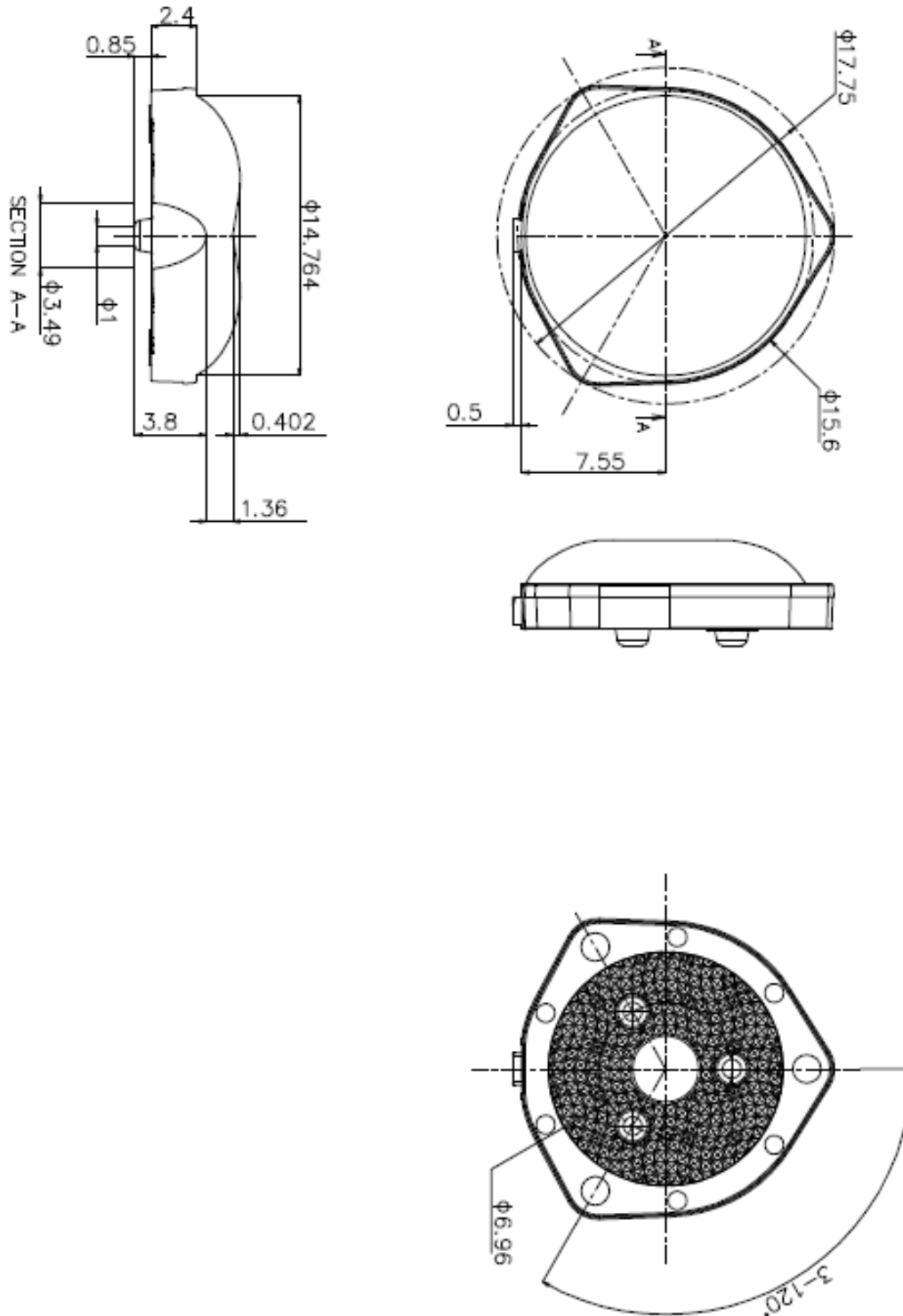
Fig2. Rendering



Note

- 1) In this design guide we use our 3030 LED in combination with a dedicated lens.
- 2) All measurements were made under the standardized environment of Seoul Semiconductor.

Mechanical Dimensions





Packaging

T.B.D

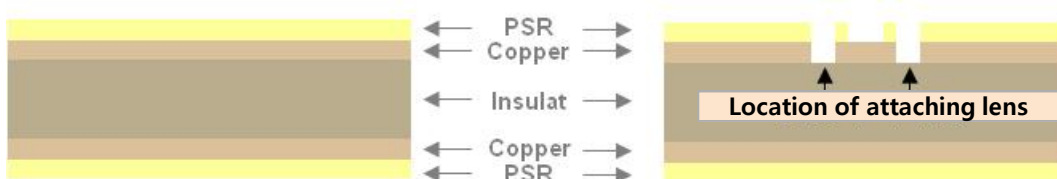
Recommended Module mounting method

1. PCB Design

Lens-kit PCB is different from general PCB which means the Lens is attached on the PCB.

Therefore the fixing part for lens is necessary for lens to be attached.

Making the hole as $\Phi 1.6$, eliminate PSR & Copper on top side of PCB and make $50\mu m$ terminal. [Refer Fig.3]

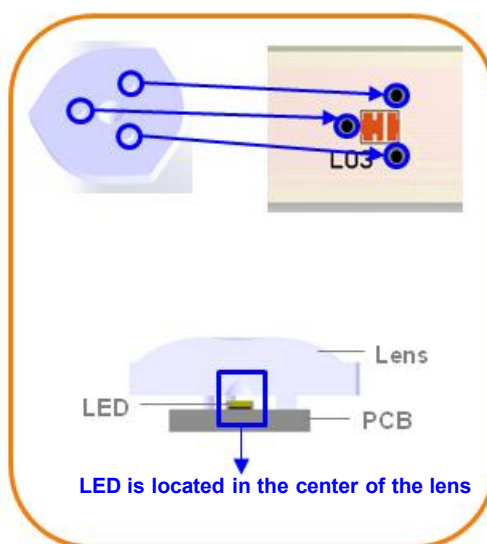


< Fig1. PCB Drawing method. >

2. Lens adhesion

When attaching the lens, it's important to match the outer surface of the lens with light emitting surface of the LED.

The lens and the LED-package should be centered within 0.2mm. Otherwise, the distribution pattern will be deteriorated and the color uniformity will be decreased.



< Fig2. Lens assembly method >

Note

- 1) Glue : Use Lottite 3220
- 2) Hardening : At $85^{\circ}C$ for 6 minutes after attaching the Lens.



Precaution for Use

T.B.D



Company Information

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Company Information

Seoul Semiconductor (www.SeoulSemicon.com) manufactures and packages a wide selection of light emitting diodes (LEDs) for the automotive, general illumination/lighting, Home appliance, signage and back lighting markets. The company is the world's fifth largest LED supplier, holding more than 10,000 patents globally, while offering a wide range of LED technology and production capacity in areas such as "nPola", "Acrich", the world's first commercially produced AC LED, and "Acrich MJT - Multi-Junction Technology" a proprietary family of high-voltage LEDs.

The company's broad product portfolio includes a wide array of package and device choices such as Acrich and Acirch2, high-brightness LEDs, mid-power LEDs, side-view LEDs, and through-hole type LEDs as well as custom modules, displays, and sensors.

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