

# PowerLED – modules for 3mm 2D slab waveguides

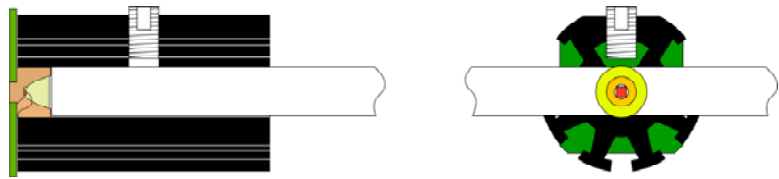
## Description:

A power LED operating at 350mA driving current couples the light via a micro reflector to a 3mm optical slab waveguide. The slab waveguide can be made of glass with included air bubbles (foam glass) or of plastic material comprising haze stuff. Light attenuation and diffusion inside the slab waveguide should fit to the waveguide dimension.

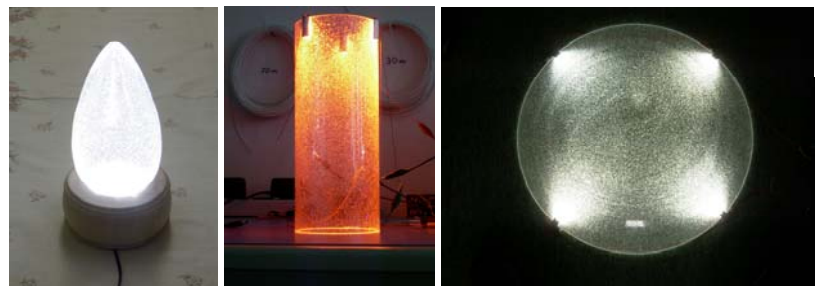
As glass slab waveguides show high mechanical tolerances in thickness and in addition the glass curvature causes a necessary mechanical slot shift, the module must compensate this. It is suitable for waveguides with a thickness of up to 4mm and a curvature diameter down to 55mm.

The module's aluminium housing serves as heat sink and makes the use of metal core PCB redundant. A low cost, standard SFP edge card connector realizes the connection to the LED driving electronics. As there is no need for heat dissipation functionality the connector has to transfer electrical energy only, and no thermal energy! (For details please see DieMount data sheet "SFP LED connection".) Each module comes with a SFP connector.

Typical applications are the setup of foam glass lamps and corresponding plastic designs.

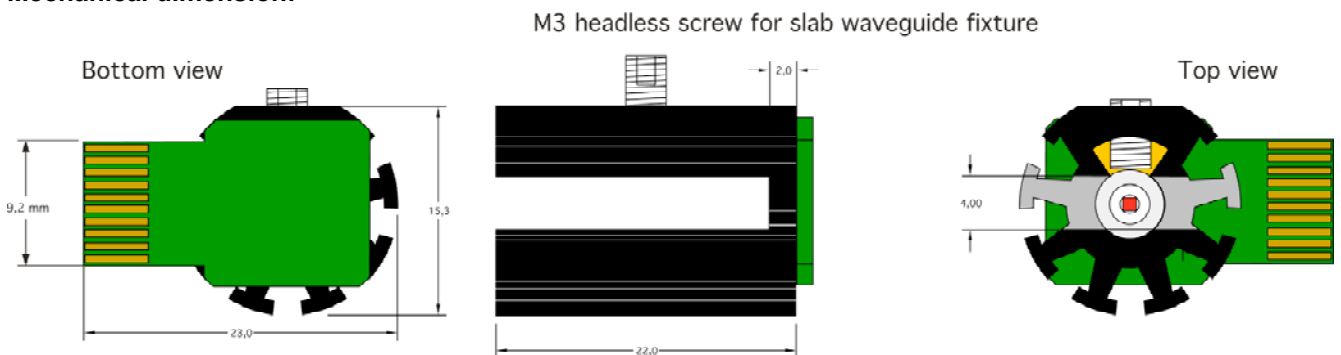


*powerLED - module design for 3mm slab waveguides*



*Lamp designs comprising 3mm slab waveguides made of foam glass material*

## Mechanical dimension:



The modules are available with red, green, blue and white power LED dice. The recommended driving current reads 350mA.

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