

# 3mm fiber RGB LED - modules

## Description:

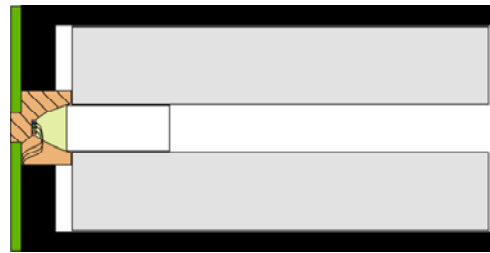
Three LED dice emitting light at wavelengths 620nm, 520nm and 460nm are placed in the focus of a micro reflector that couples their light to a 3mm diameter optical polymer fiber of 10mm length. Each LED may be operated up to 150mA current.

The fiber endface comes out in a 3mm diameter ferrule hole that is designed for butt coupling to a 3mm optical waveguide. The connected waveguide may be a polymer fiber for side light coupling (see photo on the right), a standard 3mm diameter POF for fiber illumination via the endface or a glass fiber bundle with suitable diameter. There is no fixture for the coupled fiber. The fixture must be realized by the external unit design.

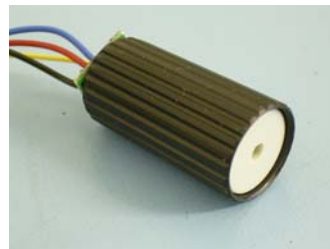
All LED dice have a common anode contact.

The module's aluminium housing serves as heat sink and makes the use of metal core PCB redundant.

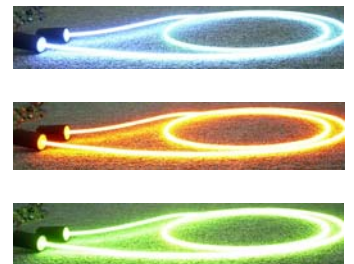
Typical applications are all kinds of illumination units that use optical fiber, side light or endface coupled.



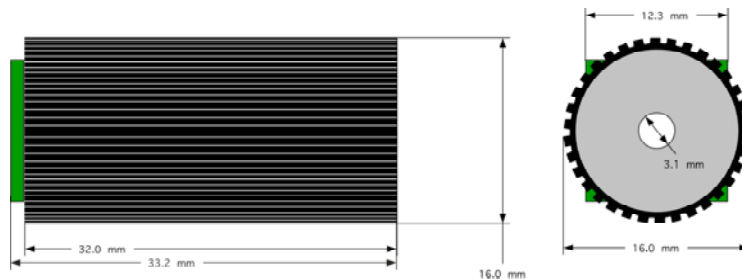
3mm fiber RGB LED - module design



3mm fiber RGB LED – module (top) and lamp unit (right) in operation at different wavelengths



## Mechanical dimension:



## Applications:

- Light module for all colour side light fiber illumination
- Light module for all colour fiber endface illumination

## Technical specifications for 3mm fiber powerLED modules:

	blue	green	red
wavelength [nm]	460	520	620
Typ. optical output power @ 150 mA [mW]	25	10	20

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