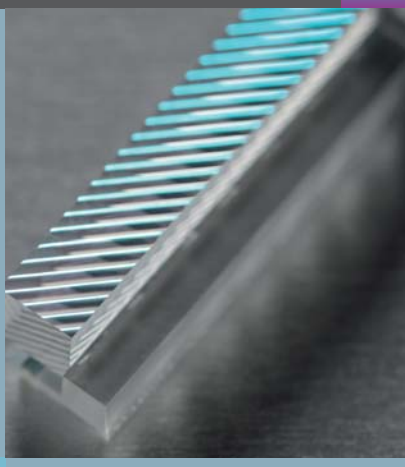
FISBA Beam Twister™ FBT

AOC (Advanced Optical Components)



Patented technology by FISBA

The FISBA Beam Twister™ FBT, based on a patented technology by FISBA OPTIK, is a unique beam symmetrization unit e.g. for fiber coupling of a diode laser bar. The FISBA Beam Twister™ FBT includes a FAC lens with a beam rotating lens array for nearly diffraction limited collimation and highest efficiency.

Your benefits are:

Choice of different diode laser pitch and emitter width

- through in-house design flexibility and optimization

More power out of your system at the same cost

- than other fiber coupling systems, resulting from highest coupling efficiency of more than 80% out of the fiber (depending on diode laser parameters)

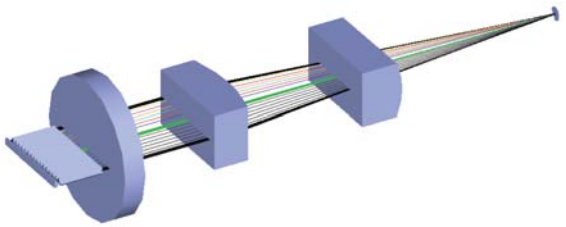
Optimized and easy assembly process

- due to customized support elements for the FBT

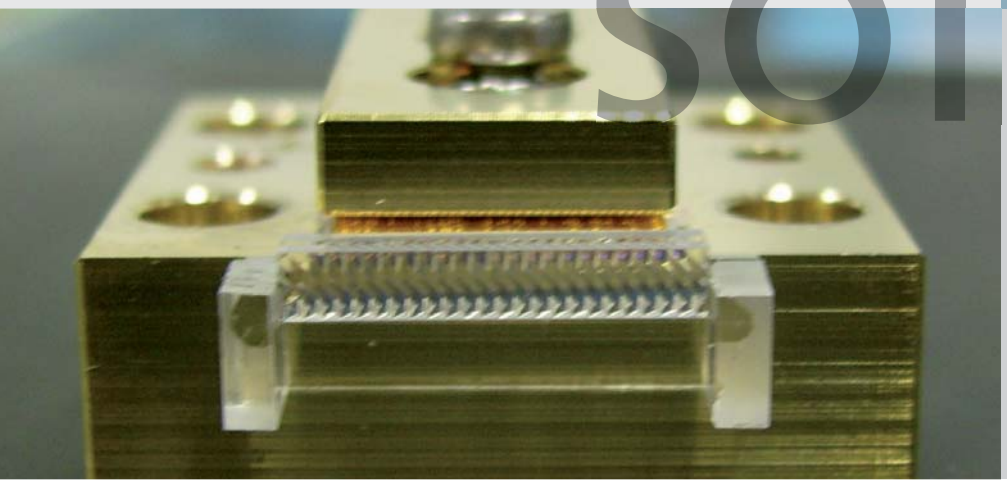
Facet-to-Focus (F2F) solutions

- FISBA offers all optical components or complete optical systems for Facet-to-Focus (F2F) solutions i.e. for fiber coupling or for beam symmetrization

Example for fiber-coupling: More than 80% coupling efficiency out of the fiber at a diode laser pitch of 500micron and emitter width of 150micron in a fiber diameter of 400micron (NA 0.22)



custom solutio



FISBA OPTIK

The following FBT elements are available for the corresponding diode laser configurations:

Diode laser parameters	Units	FBT 500	FBT 400	FBT 200
Pitch	µm	500	400	200
Emitter width	µm	≤ 150	≤ 200	≤ 80
Number of emitters		≤ 19	≤ 25	≤ 20
Transmission	%	> 97	> 97	> 97
Standard coating		AR 800-1000 nm	AR 800-1000 nm	AR 800-1000 nm
Dimensions	mm^3	3 x 3 x 12	upon request	3 x 2.5 x 6.5

Options

- Customized coatings, dimensions and coupling optics for different fiber diameters and numerical apertures are available.

Achievable fiber-coupling power efficiencies*

- FBT 500: more than 80 % (fiber diameter 400 µm; NA 0.22)
  more than 70 % (fiber diameter 200 µm; NA 0.22)
- FBT 400: more than 75 % (fiber diameter 400 µm; NA 0.22)
- FBT 200: depending on the diode laser specifications

* valid for maximum number of emitters

FISBA OPTIK

Rorschacherstrasse 268
CH-9016 St. Gallen
Switzerland
www.fisba.com

Tel: +41 71 282 31 31
Fax: +41 71 282 33 04
customsolutions@fisba. ch