

FAST- AND SLOW-AXIS COLLIMATION

C-Module



GENERAL DESCRIPTION

The Collimation Module (C-Module) is a highly efficient means of reducing the divergence of diode lasers in the fast- and slow-axis simultaneously. The module consists of two micro-optics, fixed and aligned in one single module with high precision. Alongside its optimum collimation characteristics the module guarantees a simple and cost efficient assembly of diode lasers. The compact C-Module thus guarantees highest brightness of diode lasers in combination with minimum size.

Please refer to our broad product spectrum of fast-axis and slow-axis collimators to combine your C-Module for your specific application.

ADVANTAGES

- efficient collimation
- optimized for highest brightness
- compact module
- easy to mount
- transmission up to 99%
- highest level of precision and uniformity
- long term stability
- optimized design

SERVICE

We also design, develop and manufacture customized C-Modules, which have been optimized to meet the specific requirements of your application.

C-Modules are available as a set of single components or mounted on a bottom tab for your convenience. Side tabs are available on request.

QUALITY

We operate a strict quality control policy. By testing the modules in an environment similar to the conditions they will encounter in industrial practice, we ensure that there is no discrepancy between our test results and the results subsequently achieved when our optic is used within its intended application at your site. In conjunction with our sophisticated manufacturing technology, this guarantees the production of modules with unsurpassed collimation characteristics.

Fast- and Slow-Axis Collimation

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SPECIFICATION DATA

Module	EFL _{SAC} [mm]	BFL _{FAC} [mm]	EFL _{FAC} [mm]	PE [mm]	L [mm]	H [mm]	T [mm]	D [mrad]
C-600-022-500	2.20	0.15	0.60	0.50	13.00	1.00	2.70	1.20
C-900-022-500	2.20	0.09	0.90	0.50	13.00	1.50	3.50	0.80
C-600-026-500	2.60	0.15	0.60	0.50	13.00	1.00	2.70	1.20
C-900-026-500	2.60	0.09	0.90	0.50	13.00	1.50	3.50	0.80
C-600-030-500	3.00	0.15	0.60	0.50	13.00	1.00	3.69	1.20
C-900-030-500	3.00	0.09	0.90	0.50	13.00	1.50	4.00	0.80
C-600-035-1000	3.50	0.15	0.60	1.00	13.00	1.00	4.15	1.20
C-900-035-1000	3.50	0.09	0.90	1.00	13.00	1.50	4.46	0.80
C-900-060-1000	6.19	0.09	0.90	1.00	13.00	1.50	7.00	0.80
C-900-069-1000	6.90	0.09	0.90	1.00	13.00	1.50	7.90	0.80

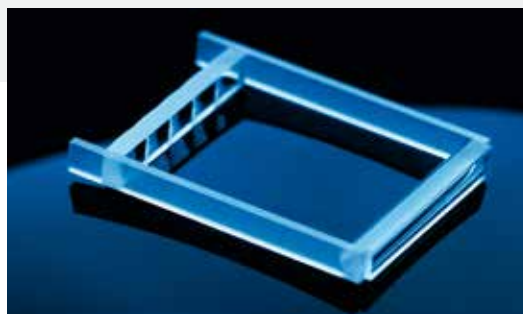
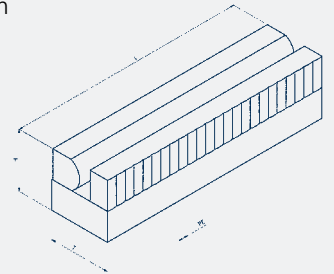
EFL: Effective focal length @ 808 nm
BFL: Back focal length @ 808 nm
PE: Pitch of emitter

Standard Coating: AR 780-1020 nm
Transmission: > 98%

L: Length (+/-0.10 mm)
according to customer specification
H: Height (+/- 0.05 mm)
T: Thickness (+/- 0.05 mm)

Material: SCHOTT and SUMITA optical glass
Final SA divergence < 2w0/EFL

Quality specification for laser diode with FA divergence of 35° (FWHM),
SA divergence of 11° (FWHM) and 150 µm emitter width



OPTIONS

- Alternative combinations based on INGENERIC's extended FAC and SAC product spectrum
- Customized focal length and pitch according to emitter characteristics
- Customized length
- Customized coating
- Bottom tabs, side tabs or shoulders for mounting

