

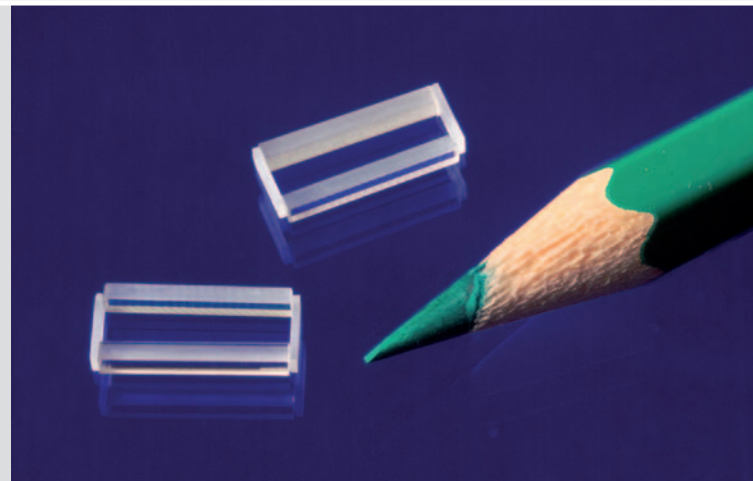
## FAST- AND SLOW-AXIS COLLIMATION C-Module

### 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 at least two micro-optics, fixed and aligned in one single module with high precision. Along side its optimum collimation characteristics the module guarantees a simple and cost efficient assembly of diode lasers. In order to further simplify mounting, we also offer the C-Module with additional surfaces for mounting. The compact C-Module thus guarantees highest brightness of diode lasers in combination with minimum size.

### 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. In order to simplify mounting, we also offer the C-Modules with additional surfaces for mounting and/or support structures.

### QUALITY

We operate a 100% quality control policy. By testing the modules in an environment identical 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

## C-Module

### SPECIFICATION DATA

Module	EFL <sub>SAC</sub> (mm)	BFL <sub>FAC</sub> (mm)	PE (mm)	L (mm)	H (mm)	W (mm)	D (mrad)
C-600-500-HB	1.60	0.15	0.50	tbd.	1.00	2.19	1.20
C-600-500-XB	1.60	0.15	0.50	tbd.	1.00	2.19	1.20
C-900-500-HB	1.60	0.09	0.50	tbd.	1.50	2.55	0.80
C-900-500-XB	1.60	0.09	0.50	tbd.	1.50	2.55	0.80

Quality Standards			
HB	High Brightness	power within an angle of +/- D [mrad]	> 85 %
XB	Extra-High Brightness	power within an angle of +/- D [mrad]	> 90 %

Options	
Customized focal length, back focal length and pitch according to emitter characteristics	
Customized length	
Customized coating	
Bottom, side taps or shoulders for mounting	

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 (+/- 0.01 mm)  
 W: Width (+/- 0.01 mm)  
 Material: SCHOTT and OHARA optical glass  
 Final SA divergence < 100 mrad  
 Quality specification for laser diode with FA divergence of 35° (FWHM), SA divergence of 11° (FWHM) and 150 µm emitter width

