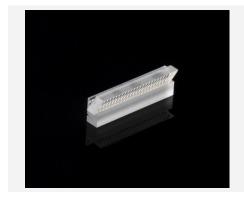


Beam Transformation System BTS(FAC160)-P0.2



Features and Advantages

Beam Transformation System (BTS) for diode laser bars with up to 50 emitters: emitter size up to 100 $\mu\text{m},$ emitter pitch 200 $\mu\text{m}.$ The BTS is used to make the beam parameter product of diode laser bars symmetrical for free beam lasers or fiber coupling.

The BTS consists of a FAC160 fast axis collimation lens, a lens array for 90° rotation of the emitters and a bottom tab.

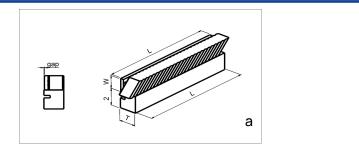
Product Specifications

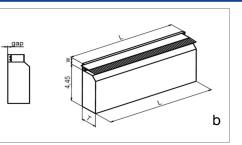
Specification Data			Unit		Value
Specification Data Material			Unit		
				FL-IR1.9 / S-TIH53 (Ohara)	
Length (L)			mm		12 ± 0.1
Width (W)			mm		0.8 ± 0.1
Clear aperture			mm ²		10.5 x 0.25
Surface quality @ 633 nm					λ/4 (typically)
Back focal length BFL @ 980 nr	n		mm		0.034
Pitch			mm		0.2
Gap			mm		0.0 ± 0.01
Numerical aperture (NA)					FA: 0.5 SA: 0.09
Transmission			%		> 98
Remaining divergence (FW1/e ²) for fast axis ⁽¹⁾			mrad	< 12	
Product Code		MOD000674 ⁽²⁾	MOD000681 ⁽²⁾	MOD000682	MOD000722 ⁽²⁾
Specification Data	Unit	Value			
AR-coating	nm	600 - 700	790 - 990	790 - 990	948 - 998
Thickness (T)	mm	1.5 ± 0.1	1.5 ± 0.1	1.5 ± 0.1	2.06 ± 0.1
Divergence measured at	nm	808			
Divergence optimized for	nm		808	976	976
Drawing Number		а	а	а	b

⁽¹⁾ Depending on laser parameters / specification is valid for an emitter-height of 1 µm and no smile of the laser diode.

⁽²⁾ Example for customization.

Product Dimensions (mm)





Rev 04 | Updated June 8, 2022 | RoHS compliant 2011/65/EU and 2015/863/EU

1

All rights reserved. Product specifications and descriptions are subject to change. All our products are patent pending. Please contact our sales representatives for complete details. Address: Bookenburgweg 4-8, 44319 Dortmund, Germany Address: No. 49, Jingyi Road, Dongcheng Street, Dongguan City, Guangdong Province, China

LIMO GmbH