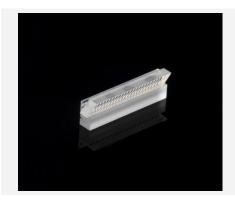


Beam Transformation System

BTS(FAC286)-P0.4



Features and Advantages

Beam Transformation System (BTS) for diode laser bars with up to 25 emitters: emitter size up to 200 μm , emitter pitch 400 μm . 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 FAC286 fast axis collimation lens, a lens array for 90° rotation of the emitters and a bottom tab.

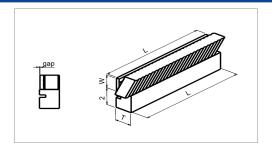
Product Specifications

Specification Data (1)	Unit	Value
Material		S-TIH53 (Ohara)
Length (L)	mm	12.0 ± 0.1
Width (W)	mm	1.0 ± 0.1
Thickness (T)	mm	1.9 ± 0.1
Clear aperture	mm²	10.5 x 0.45
Back focal length BFL @ 808 nm	mm	0.09
Pitch	mm	0.4
Gap	mm	0.05 ± 0.01
Numerical aperture (NA)		FA: 0.5 SA: 0.09
Transmission	%	> 98

Product Code		MOD000477 M	IOD000678 ⁽¹⁾ M	IOD000454 ⁽¹⁾ M	OD000679 ⁽¹⁾ M	DD000478 ⁽¹⁾ MC	DD000680 ⁽¹⁾
Specification Data	Unit	Value					
AR-coating	nm	790 - 990	790 - 990	790 - 990	790 - 990	790 - 990	790 - 990
Divergence optimized at	nm	808	976	808	976	808	976
Remaining divergence (FW1/e²) for fast axis (2)	mrad	< 7	< 7	< 10	< 10	< 13	< 13

⁽¹⁾ Example for customization — customized coatings and different pitches (e.g. 0.4 or 0.5mm) on request.

Product Dimensions (mm)



Rev 03 | Updated June 8, 2022 | RoHS compliant 2011/65/EU and 2015/863/EU

⁽²⁾ Depending on laser parameters / specification is valid for an emitter-height of 1µm and no smile of the laser diode.

⁽³⁾ Apart from free beam lasers the BTS with remaining divergence for FA<7, 10 or 13mrad can be used for coupling into 200, 400 or 600µm fibers with NA 0.22, respectively (see also BTS-HOC systems for fiber coupling).