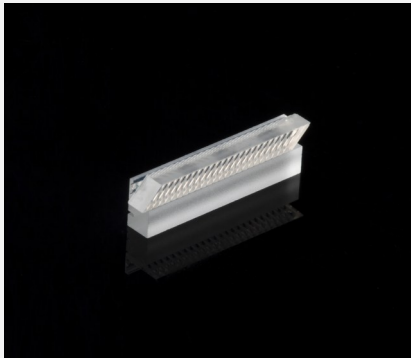


Beam Transformation System

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 $\pm$ 0.1
Width (W)	mm	1.0 $\pm$ 0.1
Thickness (T)	mm	1.9 $\pm$ 0.1
Clear aperture	mm ²	10.5 x 0.45
Back focal length BFL @ 808 nm	mm	0.09
Pitch	mm	0.4
Gap	mm	0.05 $\pm$ 0.01
Numerical aperture (NA)		FA: 0.5 SA: 0.09
Transmission	%	> 98

Product Code		MOD000477	MOD000678 ⁽¹⁾	MOD000679 ⁽¹⁾
Specification Data	Unit	Value		
AR-coating	nm	790 - 990	790 - 990	790 - 990
Divergence optimized at	nm	808	976	976
Remaining divergence (FW1/e ²) for fast axis ⁽²⁾	mrad	< 7	< 7	< 10

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

⁽²⁾ Depending on laser parameters / specification is valid for an emitter-height of 1 μm 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 600 μm fibers with NA 0.22, respectively (see also BTS-HOC systems for fiber coupling).

Product Dimensions (mm)

