

Beam Transformation System

BTS(FAC365)-P0.5



Features and Advantages

Beam Transformation System (BTS) for diode laser bars with up to 19 emitters: emitter size up to 150 μm , emitter pitch 500 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 FAC365 fast axis collimation lens, a lens array for 90° rotation of the emitters and a bottom tab.

Product Specifications

Specification Data	Unit	Value
Material		S-TIH53 (Ohara)
Length (L)	mm	11.5 ± 0.1
Width (W)	mm	1.5 ± 0.1
Thickness (T)	mm	2.05 ± 0.1
Clear aperture	mm^2	10.0×0.55
Back focal length BFL @ 808 nm	mm	0.09
Pitch	mm	0.5
Gap	mm	0.05 ± 0.01
Numerical aperture (NA)		FA: 0.6 SA: 0.09
Transmission	%	> 98
Remaining divergence (FW1/e ²) for fast axis ⁽¹⁾	mrad	< 5.5

Product Code	MOD000475	
Specification Data	Unit	Value
AR-coating	nm	790-990
Divergence optimized at	nm	808

⁽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 – customized coatings on request.

Product Dimensions (mm)

