

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 μ m, emitter pitch 500 μ 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 FAC365 fast axis collimation lens, a lens array for 90° rotation of the emitters and a bottom tab.

Product Specifications

Specification Data		Unit	Value
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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		mm²	10.0 x 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	MOD000683 ⁽²⁾
Specification Data	Unit	Value	Value
AR-coating	nm	790-990	790 - 990
Divergence optimized at	nm	808	976

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

⁽²⁾ Example for customization – customized coatings on request.

Product Dimensions (mm)

LIMO GmbH



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