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General Description:

| Advanced Optical Solutions |

Compact Beam Transformation System (BTS) for diode laser bars with 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 FAC 286 fast axis collimation lens, a lens array for 90° rotation of the emitters and a bottom tab.

Specification Data

	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
Surface quality @ 633 nm		$\lambda/4$ (typically)
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

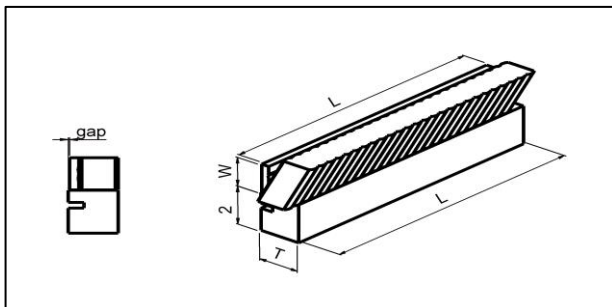
On request

Customized coating

Matrix of Product Codes

AR-coating	Remaining FA divergence (FW 1/e ²) (*)			Note
	< 7 mrad	< 10 mrad	< 13 mrad	
790 - 990 nm	MOD000477	MOD000454	MOD000478	Divergence optimized for 808 nm
790 - 990 nm	MOD000678	MOD000679	MOD000680	Divergence optimized for 976 nm

Apart from free beam lasers the BTS with remaining divergence for FA < 7, 10 or 13 mrad 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).



(*) Valid for an emitter-height of 1 μm and no smile of the laser diode.

RoHS compliant
2002/95/EG

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