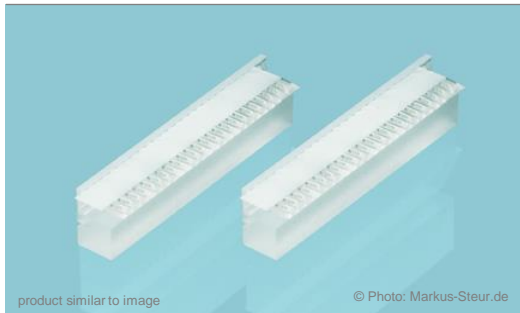


# BTS(FAC160)-P0.2 FS for Very High Power Bars

Product number: MOD000749



product similar to image

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## General Description:

## | Advanced Optical Solutions |

Beam Transformation System (BTS) for diode laser bars with up to 50 emitters: emitter size up to 100  $\mu\text{m}$ , emitter pitch 200  $\mu\text{m}$ . The BTS is used to make the beam parameter product of diode laser bars symmetrical for free beam lasers or fiber coupling.

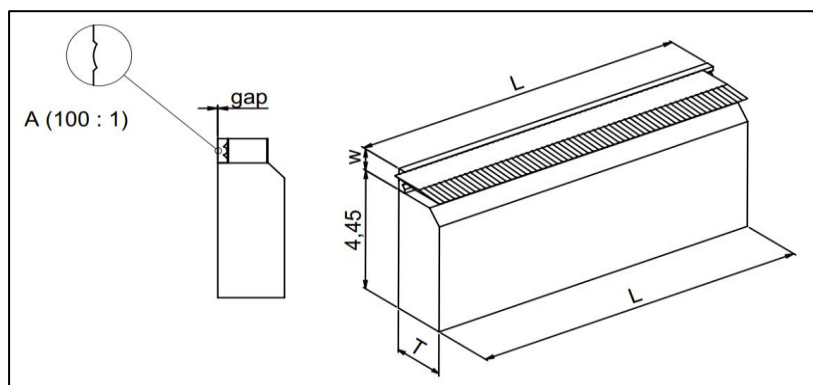
The BTS consists of a FAC160 fast axis collimation lens, a lens array made of low OH fused silica for 90° rotation of each emitter, and a bottom tab. The BTS is optimized for power > 300 W CW.

Specification Data	Unit	Value
Material		Fused Silica (IR grade, low absorption)
Length (L)	mm	12 $\pm$ 0.1
Width (W)	mm	0.8
Thickness (T)	mm	2.06 $\pm$ 0.05
Clear aperture	mm <sup>2</sup>	10.0 x 0.25
Surface quality @ 633 nm		$\lambda/4$ (typically)
Back focal length BFL @ 980 nm	mm	0.034
Pitch	mm	0.2
Gap	mm	0.0 $\pm$ 0.01
Numerical aperture (NA)		FA: 0.5 SA: 0.09
AR-coating	nm	940-998
Transmission	%	> 98
Remaining divergence (FW1/e <sup>2</sup> ) for fast axis (*)	mrad	< 12

## On request

Customized coating

Different pitch, e.g. 0.4 or 0.5 mm



(\*) Valid for an emitter-height of 1  $\mu\text{m}$  and no smile of the laser diode.

**RoHS compliant**  
2002/95/EG

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