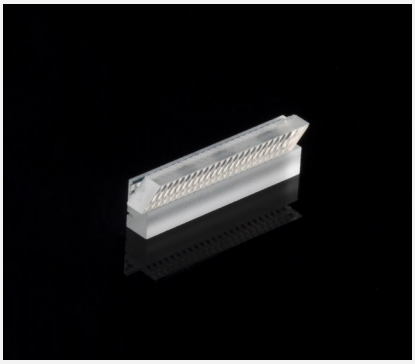
Beam Transformation System

BTS(FAC160)-P0.2



Features and Advantages

Beam Transformation System (BTS) for diode laser bars with up to 50 emitters: emitter size up to 100 µm, emitter pitch 200 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 FAC160 fast axis collimation lens, a lens array for 90° rotation of the emitters and a bottom tab.

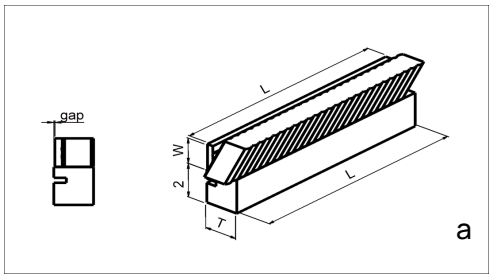
Product Specifications

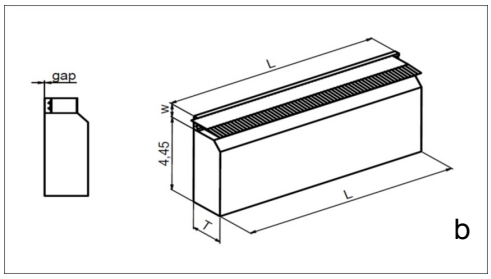
Specification Data	Unit	Value
Material		FL-IR1.9 / S-TIH53 (Ohara)
Length (L)	mm	12 ± 0.1
Width (W)	mm	0.8 ± 0.1
Clear aperture	mm²	10.5 x 0.25
Surface quality @ 633 nm		λ/4 (typically)
Back focal length BFL @ 980 nm	mm	0.034
Pitch	mm	0.2
Gap	mm	0.0 ± 0.01
Numerical aperture (NA)		FA: 0.5 SA: 0.09
Transmission	%	› 98
Remaining divergence (FW1/e²) for fast axis [1]	mrad	‹ 12

Product Code		MOD000674[2]	MOD000681[2]	MOD000682	MOD000722[2]
Specification Data	**Unit**	**Value**			
AR-coating	nm	600 - 700	790 - 990	790 - 990	948 - 998
Thickness (T)	mm	1.5 ± 0.1	1.5 ± 0.1	1.5 ± 0.1	2.06 ± 0.1
Divergence measured at	nm	808			
Divergence optimized for	nm		808	976	976
Drawing Number		a	a	a	b

[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.

Product Dimensions (mm)





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