

Compact Beam Shaper for a TopHat of 46.0 x 1.6 mm²

IOS000306



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General Description:

| Advanced Optical Solutions |

This compact beam shaper is designed for a fiber coupled diode laser to generate a homogeneous field of 46.0 x 1.6 mm² in a working distance of approximately 200 mm.

Specification data of the laser source

	Unit	Value
Wavelength	nm	790 - 990
Power	W	≤ 120
Fiber core diameter	μm	400
NA		0.22
Fiber connector		SMA905

Specification data of the beam shaper module

	Unit	Value
Wavelength	nm	790 - 990
Generated field size ¹	mm	46 (top hat region)
	mm	1.6 (gaussian like, FWHM)
Inhomogeneity ² (I _{max} -I _{min})/(I _{max} +I _{min})	%	≤ 7.5 (integrated over the other axis)
Working distance WD	mm	200 ± 15
Transmission	%	> 95
Length of the housing	mm	80.0 ± 0.1
Diameter of the housing	mm	30.5 ± 0.1

¹ The generated field size depends on the working distance. Not all combinations of field size and working distance are available.

² I_{max} and I_{min} denote the maximum and minimum intensity in the uniform field, respectively.

Options

Higher power

Different wavelength

High-spec version with reduced non-uniformity and steeper edges of the homogeneous field

Different generated field size and geometry

RoHS compliant

2002/95/EG

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