Compact Beam Shaper for a TopHat of 6 x 6 mm²

IOS000316





General Description:

| Advanced Optical Solutions |

This compact beam shaper is designed for a fiber coupled diode laser to generate a homogeneous field of $6 \times 6 \text{ mm}^2$ in a working distance of approximately 150 mm.

Specification data of the laser source	Unit	Value
Wavelength	nm	790 - 990
Power	W	≤ 120
Fiber core	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	mm²	6 x 6 (top hat region)
Inhomogeneity ² (Imax-Imin)/(Imax+Imin)	%	≤ 7.5 (integrated over the other axis)
Working distance WD	mm	150 ± 10
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.

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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² Imax and Imin denote the maximum and minimum intensity in the uniform field, respectively.