See all 32 Products in Family

1070nm, 18-23mm Dia. Input Beam, HP Sapphire Focal Flat Top Beam Shaper | Focal πShaper_1070_Q-20_HP

See More by AdlOptica

Stock **#17-594** CONTACT US

- 1 + **A$6,984**.00

ADD TO CART

Volume Pricing	
Qty 1-4	**A$6,984.00** each
Qty 5-10	**A$6,279.00** each
Qty 11+	**A$5,933.00** each
Need More?	Request Quote

Product Downloads

General

Model Number:

πShaper_1070_Q-20_HP

Type:

Beam Shaper (Sapphire)

Compatible Adapter:
#12-322

Physical & Mechanical Properties

Length (mm):
21.00

Weight (g):
70

Clear Aperture CA (mm):
38

Diameter (mm):
64.00

Input Beam Diameter, $1/e^2$ (mm):
18 - 23

Optical Properties

Transmission (%):
>99

Design Wavelength DWL (nm):
1070

Wavelength Range (nm):
1020 - 1100

Input Beam Mode:
TEM_{00}

Typical Input Beam Mode Quality, M^2:
<1.5

Input Beam Divergence (mrad):
±20

Electrical

Maximum Input Power, CW (kW):
5

Threading & Mounting

Inner Thread:
M58 x 1

Outer Thread:
M58 x 1

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

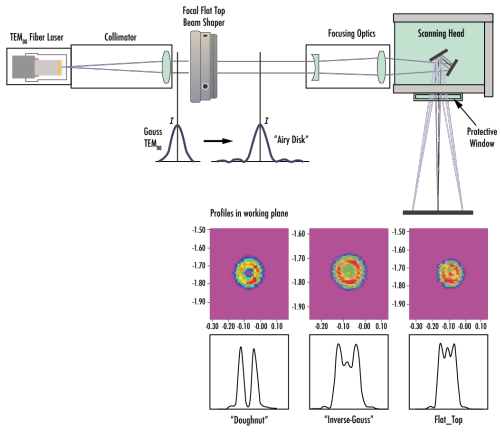
Reach 250:
Compliant

Product Details

- Shapes Gaussian Beams to Airy Disk Profile
- Airy Disk is Focusable to Flat Top Spot
- Near 100% Efficiency
- **AdlOptica πShaper Flat Top Beam Shapers** Also Available

AdlOptica Focal-πShaper (piShaper) Q Flat Top Beam Shapers are used to transform Gaussian beams to flat-top profiles after focusing through a lens. This is accomplished by transforming the Gaussian beam to airy disk profiles immediately after the piShaper. These beam shapers feature a compact design with inner and outer threading, making them easy to integrate into equipment. AdlOptica Focal-πShapers are advantageous for beam shaping in micromachining applications, including scribing and PCB drilling, as well as micro-welding applications. Multiple models are available at Nd:YAG, Ti:Sapphire, and Infrared wavelengths with compatible input beam diameters as small as 2.5mm and up to 23mm.

Technical Information


Focal Flat Top
Beam Shaper
TEM00 Fiber Laser
Collimator
Focusing Optics
Scanning Head
I
Gauss
TEM00
I
"Airy Disk"
Protective
Window
Profiles in working plane
-1.50
-1.60
-1.70
-1.80
-1.90
-0.30 -0.20 -0.10 -0.00 0.10
-1.60
-1.70
-1.80
-1.90
-0.20 -0.10 -0.00 0.10
-1.50
-1.60
-1.70
-1.80
-1.90
-0.30 -0.20 -0.10 -0.00 0.10
"Doughnut"
"Inverse-Gauss"
Flat_Top

.
;