

# **Cylindrical Lens Array**

Pitch 0.8



#### **Features and Advantages**

Lens array with cylindrical lenses on one side. Top hat profiles with high homogeneity can be generated in one dimension. <sup>(1)</sup>

\* Product similar to image, see product drawing below.

### **Product Specifications**

Specification Data		Unit		Value		
Material						Fused Silica
Length (L)		mm	20.0 ± 0.1			
Width (W)				mm		20.0 ± 0.1
Thickness (T)				mm	2.0 ± 0.1	
Clear Aperture		mm²	18.0 x 18.0			
Refractive Index n @ 248 nm /	/ @ 532 nm / (		1.5	509 / 1.461 / 1.449		
Pitch (P)		mm	0.8			
Transmission (without coatin		%	> 90			
Protective Chamfer				mm x 45°	NA	
Surface Imperfections (DIN IS			5/	3×0,1; L1×0,25; E1		
Product Code			ZLA001106 <sup>(2)</sup>	ZLA001105 <sup>(2)</sup>	ZLA001104	ZLA001103 <sup>(2)</sup>
Specification Data		Unit	Value			
Radius		mm	4.35 ± 0.13	8.70 ± 0.26	11.1 ± 0.33	16.7 ± 0.50
EFL	@ 248 nm	mm	8.55 ± 0.26	17.1 ± 0.51	21.8 ± 0.65	32.8 ± 0.98
	@ 532 nm	mm	9.44 ± 0.28	18.9 ± 0.57	24.1 ± 0.72	36.3 ± 1.09
	@1064nm	mm	9.67 ± 0.29	19.4 ± 0.58	24.7 ± 0.74	37.1 ± 1.11
Numerical Aperture [p / (2f)]	@ 248 nm		0.0468	0.0234	0.0183	0.0122
	@ 532 nm		0.0424	0.0212	0.0166	0.0110
	@ 1064nm		0.0414	0.0206	0.0162	0.0108

<sup>(1)</sup> Suitable for multi-mode laser sources M<sup>2</sup> > 20 (approx.)

<sup>(2)</sup> Example for customization – design and dimensions on request.

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## **Product Specifications**

Product Code			ZLA000487 <sup>(2)</sup>	ZLA001108 <sup>(2)</sup>	ZLA001109	ZLA001107 <sup>(2)</sup>
Specification Data		Unit	Value			
Radius		mm	$24.4 \pm 0.73$	48.0 ± 1.4	78.0 ± 2.3	105.0 ± 3.2
EFL	@ 248 nm	mm	48.0 ± 1.4	94.4 ± 2.8	153.4 ± 4.6	206.5 ± 6.2
Numerical Aperture [p / (2f)]	@ 532 nm	mm	53.0 ± 1.6	104.2 ± 3.1	169.3 ± 5.1	227.9 ± 6.8
	@1064nm	mm	54.3 ± 1.6	106.8 ± 3.2	173.5 ± 5.2	233.5 ± 7.0
	@ 248 nm		0.0083	0.0042	0.0026	0.0019
	@ 532 nm		0.0075	0.0038	0.0024	0.0018
	@ 1064nm		0.0074	0.0037	0.0023	0.0017

<sup>(2)</sup> Example for customization – design and dimensions on request.

#### Product Drawing (mm)



Diced asymmetrically - symmetric dicing on request

Rev 05 | Updated June 8, 2022 | RoHS compliant 2011/65/EU and 2015/863/EU

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