

# Telescope Array 150/500 and 200/400

## Slow Axis Collimator Array with double side structure



### Features and Advantages

Telescope-Arrays for the collimation of the slow axis of diode laser bars with an emitter pitch of 400 or 500  $\mu\text{m}$ .

### Product Specifications

Specification Data	Unit	Value		
Material		S-TIH53 (Ohara)		
Refractive Index $n$ @ 808 nm		1.823		
<b>Product Code</b>		<b>ZLA000390</b> <sup>(1)(2)</sup>	<b>ZLA000579</b> <sup>(1)</sup>	<b>ZLA000593</b> <sup>(2)</sup>
<b>Specification Data</b>	<b>Unit</b>	<b>Value</b>		
Width (W)	mm	12.0 $\pm$ 0.05	12.0 $\pm$ 0.05	10.8 $\pm$ 0.05
Length (L)	mm	1.5 $\pm$ 0.05	1.0 $\pm$ 0.05	1.0 $\pm$ 0.05
Thickness (T)	mm	4.5 $\pm$ 0.01	2.93 $\pm$ 0.01	2.93 $\pm$ 0.01
Pitch (P)	$\mu\text{m}$	500	400	400
Max. Emitter Size	$\mu\text{m}$	150	200	200
Clear Aperture ( $A_w \times A_L$ )	$\text{mm}^2$	11.0 x 1.4	11.0 x 0.9	10.4 x 0.9
Average Radius - Side A / Side B	mm	2.05 $\pm$ 0.04 / 3.95 $\pm$ 0.08	1.35 $\pm$ 0.03 / 2.56 $\pm$ 0.05	1.35 $\pm$ 0.03 / 2.56 $\pm$ 0.05
Effective Focal Length (EFL) @ 808 nm	mm	2.48	1.62	1.62
Numerical Aperture (NA)		0.09	0.08	0.08
Typical Remaining Divergence ( $\text{FW}/e^2$ )	mrad	65	100	100
AR Coating	nm	790 - 990	790 - 990	760 - 850
Transmission	%	> 99	> 99	> 99
Surface Imperfections (DIN ISO10110-7)		5/ 10x0.025; C4x0.1; L4x0.04 E <sup>(3)</sup>	5/ 10x0.025; C2x0.1; L2x0.025 E <sup>(3)</sup>	5/ 10x0.025; C4x0.1; L4x0.04 E <sup>(3)</sup>

<sup>(1)</sup> Mark on side A applies (see drawing below)

<sup>(2)</sup> Example for customization – design, dimensions, coatings & bottom tabs for mounting on request.

<sup>(3)</sup> Chipping on short edge 0.2, chipping on long edge 0.08.

### Product Drawing (mm)

