

4.45 x 2.20mm, 3.200 ROC, 750µm Pitch, Silicon, 1 x 4 Linear Microlens Array



#21-183, 7.45 x 2.20mm, 1.119 ROC, 750µm Pitch, 1 x 8 Linear Microlens Array

Stock **#21-178** CLEARANCE CONTACT US

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1

+

€89⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-10	€89,00 each
Qty 11-25	€80,00 each
Qty 26-49	€75,00 each
Need More?	Request Quote

i Prices shown are exclusive of VAT/local taxes

Product Downloads

General	
Type:	1 x 4 Linear Array
Lens Profile:	Spherical
Note:	Linear arrays are centered on the part and surrounded by inactive lenses.

Physical & Mechanical Properties	
0.69 (of each lens)	Diameter (mm):
0.42 (of each lens)	Clear Aperture CA (mm):
4.45 x 2.20 ±0.02	Dimensions (mm):
3.200 ±3%	Radius R (mm):
0.50 ±0.025	Thickness (mm):
Optical Properties	
Silicon	Substrate: ☐
BBAR (1250-1620nm)	Coating:
1250 - 1620	Wavelength Range (nm):
R _{avg} ≤0.5% @ 1250 - 1620	Coating Specification:
1550	Design Wavelength DWL (nm):
750 ±0.3	Pitch (µm):
1.143	Working Distance (mm):
Source: 0.0104 Target: 0.25	Mode Field Diameter (mm):
Regulatory Compliance	
View	Certificate of Conformance:

Product Details

- Fused Silica and Silicon Substrates
- 1x4 and 1x8 Lens Array Configurations
- Ideal for Fiber Coupling and Collimating

Linear Microlens Arrays are available in fused silica and silicon substrates with linear arrays of either 4 or 8 lenses. Silicon has a high index of refraction, enabling short focal length, high-NA lens array designs, while fused silica offers excellent thermal stability and visible transmission to facilitate easy alignment. Linear Microlens Arrays are used to collimate and couple fiber arrays in fiber-to-fiber or laser-to-fiber applications, such as with semiconductor laser diodes. These lenses are AR coated for the near-infrared (NIR) with designs for 1310 and 1550nm, making them ideal for use with NIR lasers or in telecommunications.

Technical Information

LINEAR MICROLENS ARRAYS						
MFD, Source (μm)	MFD, Target (μm)	Working Distance (μm)	Design Wavelength (nm)	Substrate	Stock No. 1x4 Array	Stock No. 1x8 Array
10.4	85	15 in air, 10 in glue	1550	Fused Silica	#21-172	#21-173
9.2	250	600	1550	Fused Silica	#21-174	#21-175
9.2	80	286	1310	Silicon	#21-176	#21-177
10.4	250	1143	1550	Silicon	#21-178	#21-179
9.2	25	1202	1310	Silicon	#21-180	#21-181
3.0	250	304	1310	Silicon	#21-182	#21-183

Source; eg. PIC, laser diode, fiber

MLA

Working Distance

Coupling distance

MLA

Receiver; eg. fiber

Fiber

MFD_{source}

MFD_{target}

MFD = Mode Field Diameter