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## 4.45 x 2.20mm, 1.119 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 **#21-182** CLEARANCE CONTACT US

⊖ 1 ⊕ **S\$155<sup>00</sup>**

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Volume Pricing	
Qty 1-10	<b>S\$155.00</b> each
Qty 11-25	<b>S\$140.00</b> each
Qty 26-49	<b>S\$133.00</b> each
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### Product Downloads

#### General

1 x 4 Linear Array **Type:**

Spherical **Lens Profile:**

Linear arrays are centered on the part and surrounded by inactive lenses. **Note:**

## Physical & Mechanical Properties

0.53 (of each lens) **Diameter (mm):**

0.42 (of each lens) **Clear Aperture CA (mm):**

4.45 x 2.20 ±0.02 **Dimensions (mm):**

1.119 ±3% **Radius R (mm):**

0.50 ±0.025 **Thickness (mm):**

## Optical Properties

Silicon **Substrate:**

BBAR (1250-1620nm) **Coating:**

1250 - 1620 **Wavelength Range (nm):**

$R_{avg} \leq 0.5\%$  @ 1250 - 1620 **Coating Specification:**

1310 **Design Wavelength DWL (nm):**

750 ±0.3 **Pitch (µm):**

0.304 **Working Distance (mm):**

Source: 0.003  
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 ( $\mu\text{m}$ )	MFD, Target ( $\mu\text{m}$ )	Working Distance ( $\mu\text{m}$ )	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

