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1.45 x 0.70mm, 1.076 ROC, 250µm 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 **#21-176 1 In Stock**

⊖ 1 ⊕ **S\$155⁰⁰**

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Volume Pricing	
Qty 1-10	S\$155.00 each
Qty 11-25	S\$140.00 each
Qty 26-49	S\$133.00 each
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General

1 x 4 Linear Array

Type:

Spherical

Lens Profile:

Note:

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

Physical & Mechanical Properties

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

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

1.45 x 0.70 ±0.02 **Dimensions (mm):**

1.076 ±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):**

250 ±0.3 **Pitch (µm):**

0.286 **Working Distance (mm):**

Source: 0.0092
Target: 0.08 **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

