

[See all 12 Products in Family](#)

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 ⊕ A\$178⁰⁰

ADD TO CART

Volume Pricing

| | |
|------------|-------------------------------|
| Qty 1-10 | A\$178.00 each |
| Qty 11-25 | A\$160.00 each |
| Qty 26-49 | A\$152.00 each |
| Need More? | Request Quote |

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

0.23 (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 |

