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## 4.30 x 2.05mm, 0.575 ROC, 750µm Pitch, Fused Silica, 1 x 4 Linear Microlens Array



#21-183, 7.45 x2.20mm, 1.119 ROC, 750µm Pitch, 1 x8 Linear Microlens Array

Stock **#21-174** [CONTACT US](#)

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 1 

+

**£89<sup>00</sup>**

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-10       | <b>£89.00</b> each            |
| Qty 11-25      | <b>£80.00</b> each            |
| Qty 26-49      | <b>£76.00</b> each            |
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**!** Prices shown are exclusive of VAT/local taxes

Product Downloads

| General                                                                   |               |
|---------------------------------------------------------------------------|---------------|
| 1 x4 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):             |
| 4.30 x2.05 ±0.05                     | Dimensions (mm):                    |
| 0.575 ±3%                            | Radius R (mm):                      |
| 1.00 ±0.01                           | Thickness (mm):                     |
| Optical Properties                   |                                     |
| Fused Silica (Corning 7980)          | Substrate: <input type="checkbox"/> |
| BBAR (1250-1620nm)                   | Coating:                            |
| 1250 - 1620                          | Wavelength Range (nm):              |
| R <sub>avg</sub> ≤0.3% @ 1250 - 1620 | Coating Specification:              |
| 1550                                 | Design Wavelength DWL (nm):         |
| 750 ±0.3                             | Pitch (µm):                         |
| 0.6                                  | Working Distance (mm):              |
| Source: 0.0092<br>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<sub>source</sub>

MFD<sub>target</sub>

**MFD = Mode Field Diameter**