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Microlens Array 10 x 10mm, 500µm Pitch, 0.25° Divergence, UV-VIS Coated



Microlens Arrays



Stock #21-154 **3 In Stock**

S\$1,311⁰⁰

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Volume Pricing	
Qty 1-10	S\$1,311.00 each
Qty 11-25	S\$1,185.00 each
Qty 26-49	S\$1,116.00 each
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General

Type:
Lens Array

Lens Profile:
Spherical

Type of Optics:
Plano-Convex

Physical & Mechanical Properties

±0.05 **Dimensional Tolerance (mm):**

10.0 x 10.0 **Dimensions (mm):**

20.00 **Radius R (mm):**

1.20 ±0.05 **Thickness (mm):**

Optical Properties

46.70 **Effective Focal Length EFL (mm):**

[Fused Silica](#) **Substrate:**

UV-VIS (250-700nm) **Coating:**

250 - 750 **Wavelength Range (nm):**

$R_{\text{abs}} \leq 1.0\%$ @ 350 - 450nm
 $R_{\text{avg}} \leq 1.5\%$ @ 250 - 700nm **Coating Specification:**

±0.25 **Divergence Angle (°):**

500.00 ±0.25 **Pitch (µm):**

Regulatory Compliance

[Compliant](#) **RoHS 2015:**

[View](#) **Certificate of Conformance:**

[Compliant](#) **Reach 235:**

Product Details

- Square Lens and Fly's Eye Configurations
- Precision Fused Silica Substrates

Microlens arrays are useful for homogenizing a variety of modern light emitters from line-narrowed excimer lasers to high power LEDs. Microlenses are well suited for applications that require high efficiency and non-gaussian uniformity. All microlens arrays are constructed from UV-grade fused silica, offering exceptional performance from 200nm to 2.5µm. The microlens arrays are manufactured using standard semiconductor technologies, yielding very accurate shaping of the lens profile and precise positioning of the lenses within an array. We offer our arrays in two configurations:

Square Microlens Arrays

Our square arrays are available in a standard 10mm x 10mm configuration in a variety of lens pitch and focal length options. Square microlenses are commonly used for beam homogenization and shaping, yielding spot patterns or a square flat-top pattern. The lenses feature a high fill factor which eliminates zero-order hot spots in the illuminated field. Square lenses are often used in pairs, in conjunction with a PCX lens (see above). Typical applications include welding, drilling, laser ablation, and fiber coupling.

Fly's Eye Condenser Arrays

Our fly's eye condensers arrays are available in 5 and 10mm square configurations, and are designed for flat-top and line generation. The condenser arrays are a monolithic assembly of dual-surface cylindrical microlenses, creating condensers which are completely free of adjustment. These microlenses are commonly used in applications requiring a large illuminated field with a short working distance, such as medical laser use, solar simulation, UV-curing, semiconductor instrumentation and fluorescence microscopy.



Technical Information

