Aspheric Microlenses

- Molded glass aspheric microlenses
- · Corrected for use with laser diodes
- Diffraction limited performance
- · Mounting flanges built in

These aspheric lenses are manufactured by precision molding of optical crown glass. Aspheric surfaces permit a higher degree of correction than spherical surfaces thereby providing for improved performance out of a simple, single element lens. This range



of microlenses have been corrected for use with a standard laser diode window and are primarily intended for the collection and collimation of laser diode radiation. They have diffraction limited performance at any wavelength in the laser diode spectrum and can be Anti-Reflection coated upon request. Since the lenses have been molded a mounting flange has been built in to the lens removing the need for costly and inconvenient mounting cells. A range of numerical apertures are offered and this should be selected according to the application.

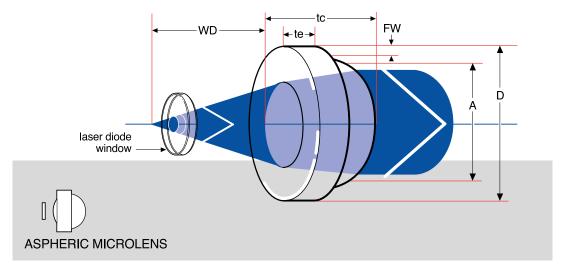
Specifications & Tolerances

Focal length: ±2%@780nm Surface accuracy: $\lambda/2$ @780nm

Surface quality: 40-20 Window: BK7- 0.25mm

Coating: Optional AR (see pages 18 and 19)

Diameter: ±0.2mm
Thickness: ±0.2mm
Centration: ±0.1mm
Material: Corning C0550



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| Numerical Aperture | Focal Length (mm) | Diameter, D (mm) | Thickness Center, tc (mm) | Thickness Edge, te (mm) | Flange Width, FW (mm) | Clear Aperture, A (mm) | Working Distance, WD (mm) | Price | PART NUMBER |
|-----------------------|-------------------------|---------------------|---------------------------------|-------------------------------|-----------------------------|------------------------------|---------------------------------|-------|----------------|
| 0.15 | 18.40 | 6.50 | 2.2 | 1.8 | 0.35 | 5.5 | 17.1 | | 023-5515 |
| 0.25 | 11.11 | 7.20 | 5.0 | 4.2 | 0.40 | 5.5 | 8.0 | | 023-5525 |
| 0.30 | 6.16 | 4.70 | 3.5 | 2.9 | 0.30 | 3.7 | 4.4 | | 023-5530 |
| 0.40 | 6.24 | 7.20 | 5.4 | 4.2 | 0.65 | 5.0 | 3.5 | | 023-5540 |
| 0.50 | 2.00 | 3.00 | 2.0 | 1.4 | 0.30 | 2.0 | 1.1 | | 023-5550 |
| 0.55 | 4.51 | 6.33 | 2.9 | 1.6 | 0.55 | 5.0 | 2.9 | | 023-5555 |

For Anti-Reflection coatings see the table on pages 18 and 19 - append coating suffix and specify surfaces to be coated.

Spherical Lenses

Cylindrical Lenses

Lens Kits

Achromatic Doublets

Multi-Element

Micro Optics

Mirrors

Substrates & Windows

Beamsplitters

Polarizers

Filter & Apertures