SPHERICAL LENSES

Your One-Stop Source for Spherical Lenses

From prototype to production, Rainbow Research Optics, Inc (RROI) designs, manufactures, and coats **spherical lenses**. Spherical lenses are one of the most basic optical components to produce. With complete in-house capabilities, RROI is able to offer spherical lenses at the lowest pricing with fast delivery times.

✓ From 3.0 mm to 16 in. diameter
✓ Scratch dig up to 10-5 and tight tolerances
✓ Stock inventory

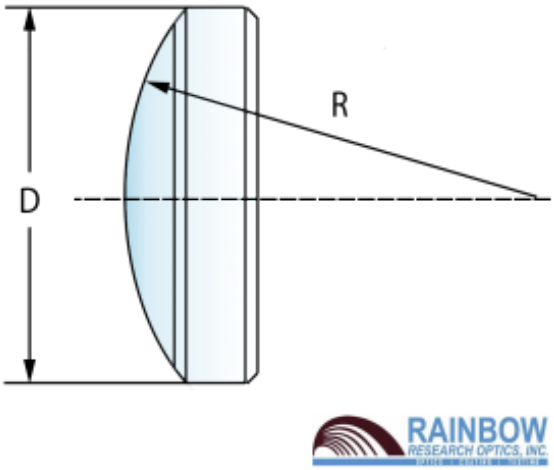
Quick find: • Plano Convex (https://www.rr-optics.com/spherical-lenses/#plcx) • Plano Concave (https://www.rr-optics.com/spherical-lenses/#plcc) • Bi-Convex (https://www.rr-optics.com/spherical-lenses/#cxcx) • Bi-Concave (https://www.rr-optics.com/spherical-lenses/#cccc) • Bestform (https://www.rr-optics.com/spherical-lenses/#bestform) • Achromatic Doublet (https://www.rr-optics.com/spherical-lenses/#achromatic)

STANDARD SPHERICAL LENSES

Customization is available beyond what's listed. Contact us (https://www.rr-optics.com/contact-page/) with your requirements.

Convex Lenses – Fused Silica – Spherical	(part code: PXUV)

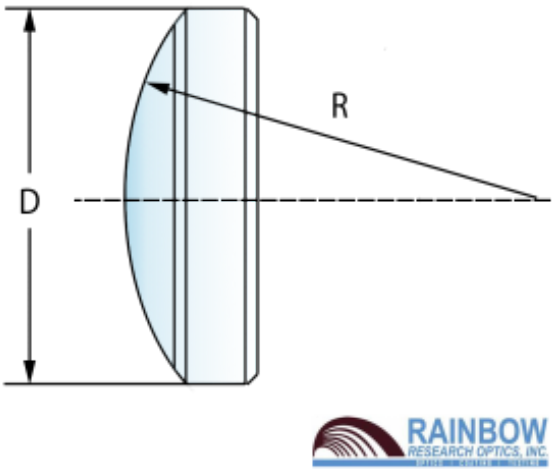
Substrate: UV Fused Silica
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/10 @ 633 nm
Surface Quality: 10-5 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°



Convex Lenses – BK7 – Spherical

(part code: PXC)

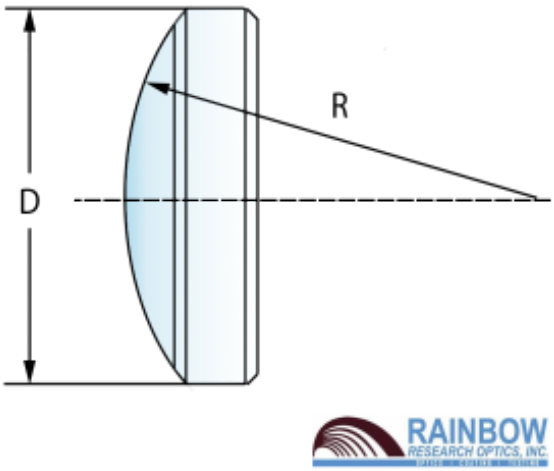
Substrate: BK7
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/10 @ 633 nm
Surface Quality: 10-5 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°



Convex Lenses – CaF_2 (VUV) – Spherical

(part code: PXCF)

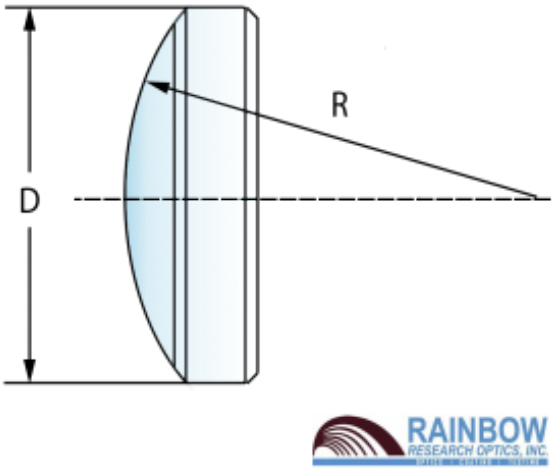
Substrate: VUV grade CaF_2
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/10 @ 633 nm
Surface Quality: 20-10 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°



Convex Lenses – CaF_2 (IR) – Spherical

(part code: PXCFIR)

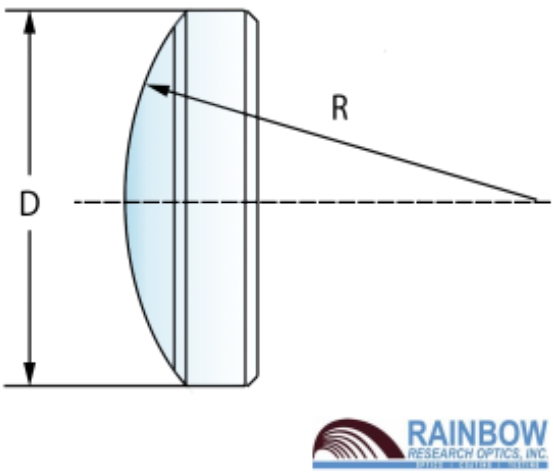
Substrate: IR grade CaF_2
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/4 @ 633 nm
Surface Quality: 40-20 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°



Convex Lenses – MgF_2 (VUV) – Spherical

(part code: PXMF)

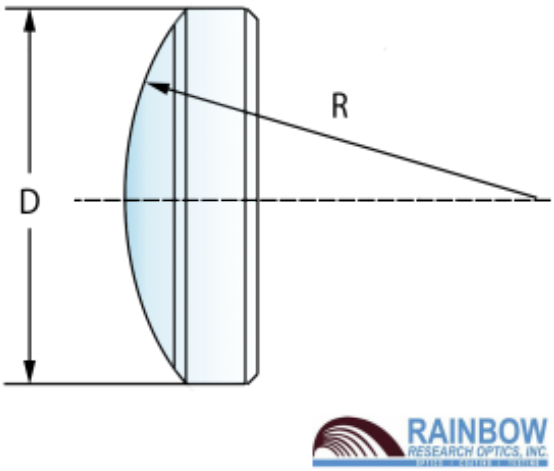
Substrate: VUV grade MgF_2
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/10 @ 633 nm
Surface Quality: 20-10 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°



Convex Lenses – SF11 – Spherical

(part code: PXSF11)

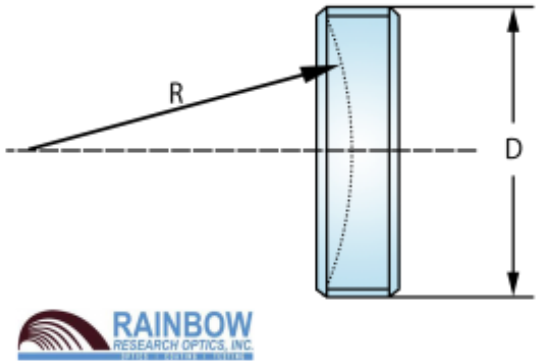
Substrate: SF11
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/10 @ 633 nm
Surface Quality: 20-10 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°



Concave Lenses – BK7 – Spherical

(part code: PVC)

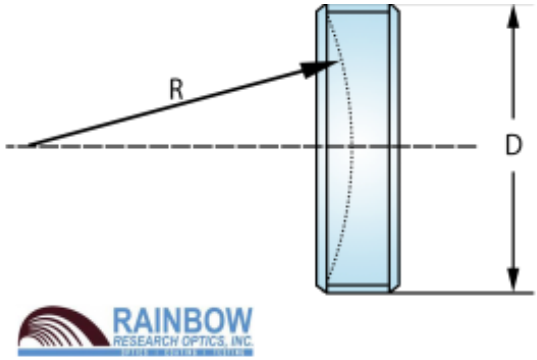
Substrate: Bk7
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/10 @ 633 nm
Surface Quality: 10-5 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°



Concave Lenses – Fused Silica – Spherical

(part code: PVUV)

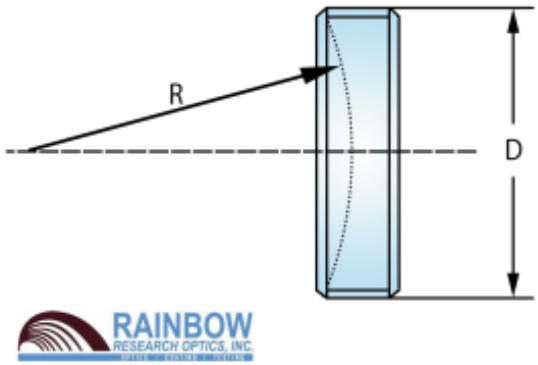
Substrate: UV Fused Silica
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/10 @ 633 nm
Surface Quality: 10-5 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°



Concave Lenses – SF11 – Spherical

(part code: PVSF11)

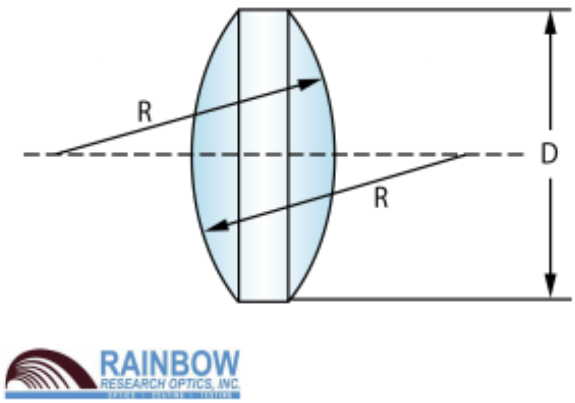
Substrate: SF11
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/10 @ 633 nm
Surface Quality: 20-10 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°



Bi-Convex Lenses – BK7 – Spherical

(part code: BXC)

Substrate: BK7
Diameter Tolerance: +0.0/-0.20mm
Thickness Tolerance: ±0.25mm
Surface Irregularity: λ/10 @ 633nm
Surface Quality: 10-5 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: <3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3mm face width at 45°

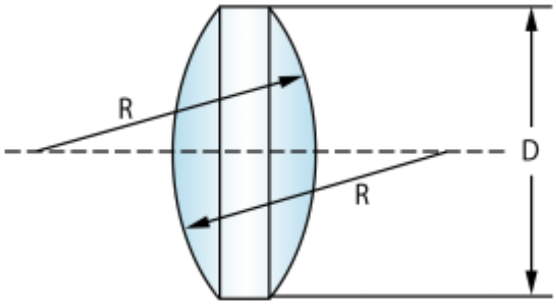


Bi-Convex Lenses – Fused Silica – Spherical

(part code: BXUV)

Substrate: UV Fused Silica
Diameter Tolerance: +0.0/-0.20 mm

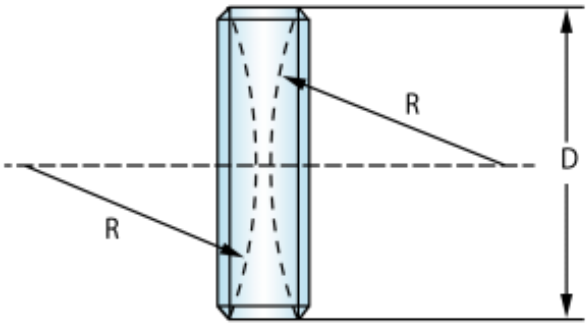
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/10 @ 633 nm
Surface Quality: 10-5 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°



Bi-Concave Lenses – BK7 – Spherical

(part code: BVC)

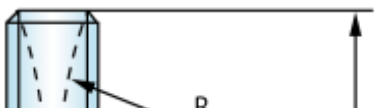
Substrate: BK7
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/10 @ 633 nm
Surface Quality: 10-5 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°

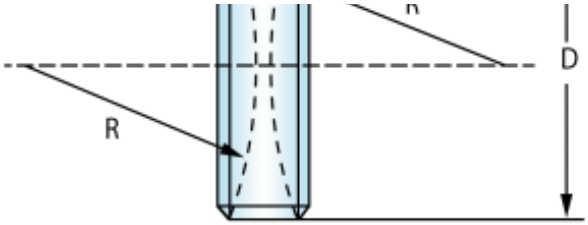


Bi-Concave Lenses – Fused Silica – Spherical

(part code: BVUV)

Substrate: UV Fused Silica
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/10 @ 633 nm
Surface Quality: 10-5 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°

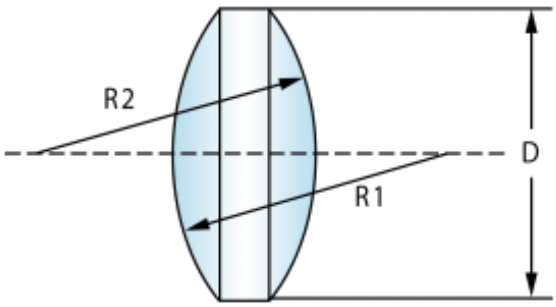




Positive Bestform Lenses – Spherical

(part code: BFCXC)

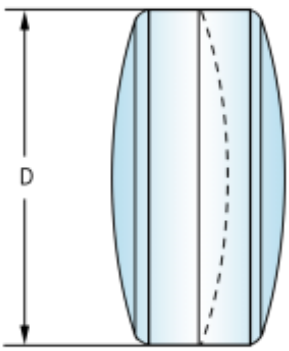
Substrate: UV Fused Silica or BK7
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/10 @ 633 nm
Surface Quality: 10-5 laser quality
Focal Length Tolerance: ± 0.5%
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°



Achromatic Doublet Lenses – Spherical

(part code: ADL)

Substrate: Contact us
Radius Tolerance: ±1.0%
Diameter Tolerance: +0.0/-0.20 mm
Thickness Tolerance: ±0.25 mm
Surface Irregularity: λ/4 @ 633 nm
Surface Quality: 40-20
Centration Error: < 3 arc min.
Clear Aperture: > 85% of diameter
Edge Bevel: 0.3 mm face width at 45°



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Product Details

Fill in fields if applicable.

Part Name or Part Code*

Material*

Quantity*

Delivery Time

Diameter

Thickness

Length

Width

S1 Raidus

Parallelism or Wedge

Flatness/Irregularity @633nm

Surface Quality (Scratch/Dig)

Coating Requirements

Questions & Comments

Any additional product details or questions?

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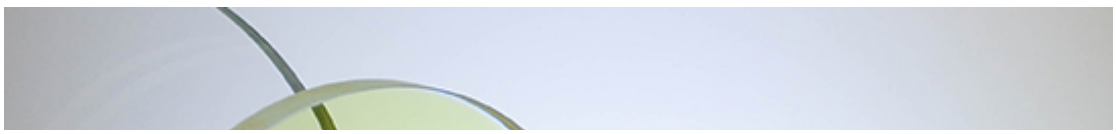
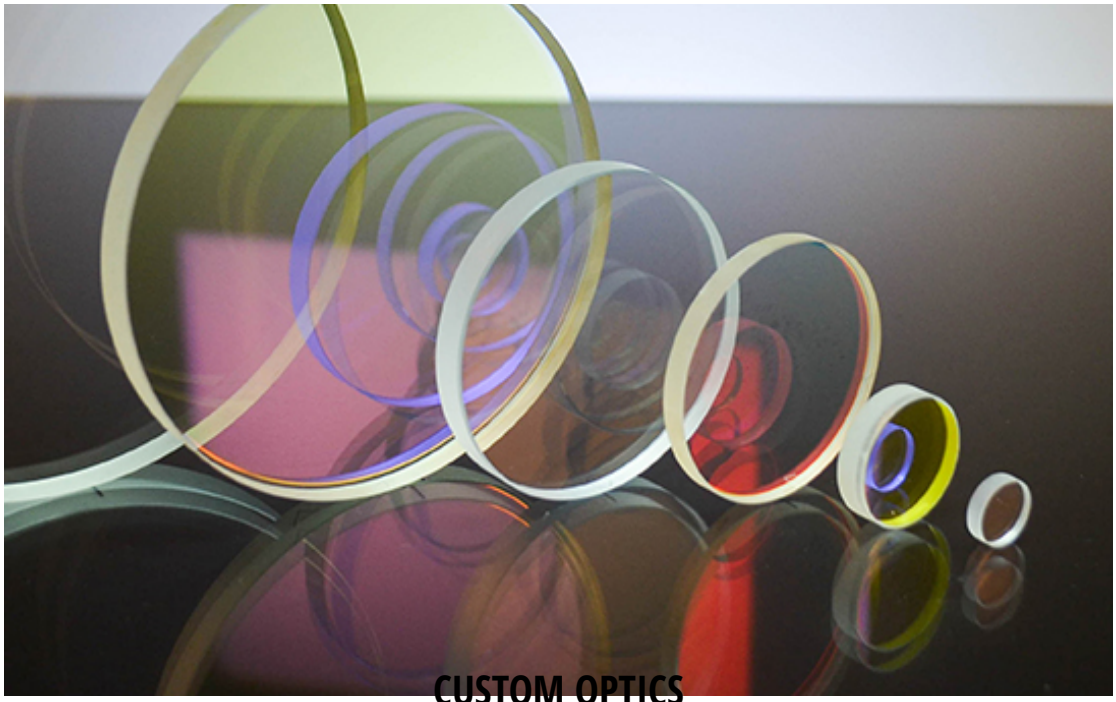
Rainbow Research Optics, Inc (RROI) is ISO 9001:2015 Certified and ITAR Registered





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