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# 4.76mm Diameter, Ruby Half-Ball Lens

Stock **#49-563** **20+ In Stock**

- 1 + **C$48**.30

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| Qty 1-10 | **C$48.30** each |
| Qty 11-49 | **C$38.50** each |
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## General

**Type:**
Half-Ball Lens

## Physical & Mechanical Properties

**Diameter (mm):**
4.76

**Radius R (mm):**
2.38

**Specific Gravity (g/cm$^3$):**
3.98

**Thickness (mm):**
2.38

**Compressive Strength (psi):**
300,000

**Diameter Tolerance (µm):**
±2.54

## Optical Properties

**Substrate:**
Ruby Doped Sapphire ($Al_2O_3$)

**Coating:**
Uncoated

**Index of Refraction ($n_d$):**
1.77

**Sphericity (µm):**
0.64

## Environmental & Durability Factors

**Melting Temperature (°C):**
2053.00

## Regulatory Compliance

**RoHS 2015:**
Compliant

**Certificate of Conformance:**
View

**Reach 247:**
Compliant

## Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

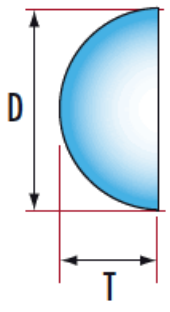
Learn more about our custom manufacturing capabilities or submit an inquiry here.

# Product Details

- Excellent for Severe Environments
- High Chemical Stability
- Sapphire and Ruby Ball Lenses Also Available

Sapphire and Ruby Half-Ball Lenses feature a very short back focal length with the convenience of a flat surface for easy mounting. Sapphire features a high index of refraction and excellent broadband transmission characteristics. Ruby half-ball (hemispherical) lenses are easier to see and, therefore, easier to handle for physical applications. Sapphire and Ruby Half-Ball Lenses are very chemically stable and are great for severe environments, high-temperature applications, and applications requiring high melting points. Typical applications include fiber communication, endoscopy, microscopy, optical pick-up devices, and laser measurement systems.

## Technical Information

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