

# 0.5mm Diameter, Ruby Half-Ball Lens



Stock **#49-557** 20+ In Stock

-

1

+

A\$51<sup>.20</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-10       | A\$51.20 each                 |
| Qty 11-49      | A\$40.80 each                 |
| Need More?     | <a href="#">Request Quote</a> |

Product Downloads

General

Type:

Half-Ball Lens

Physical & Mechanical Properties

|      |                           |
|------|---------------------------|
| 0.50 | Diameter (mm):            |
| 0.25 | Radius R (mm):            |
| 3.98 | Specific Gravity (g/cm³): |

|         |                             |
|---------|-----------------------------|
| 0.25    | Thickness (mm):             |
| 300,000 | Compressive Strength (psi): |
| ±2.54   | Diameter Tolerance (µm):    |

Optical Properties

|                                                       |                                        |
|-------------------------------------------------------|----------------------------------------|
| Ruby Doped Sapphire (Al <sub>2</sub> O <sub>3</sub> ) | Substrate: <input type="checkbox"/>    |
| Uncoated                                              | Coating:                               |
| 1.77                                                  | Index of Refraction (n <sub>d</sub> ): |
| 0.64                                                  | Sphericity (µm):                       |

Environmental & Durability Factors

|         |                           |
|---------|---------------------------|
| 2053.00 | Melting Temperature (°C): |
|---------|---------------------------|

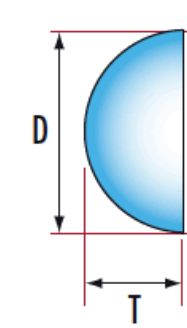
Regulatory Compliance

|           |                             |
|-----------|-----------------------------|
| Compliant | RoHS 2015:                  |
| View      | Certificate of Conformance: |
| Compliant | Reach 247:                  |

## 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



## Custom

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](#).