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1.0mm Diameter, Sapphire Half-Ball Lens



Stock **#48-428** 20+ In Stock

-

1

+

£25²⁰

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Volume Pricing	
Qty 1-10	£25.20 each
Qty 11-49	£20.00 each
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Product Downloads

General

Type:

Half-Ball Lens

Physical & Mechanical Properties

1.00	Diameter (mm):
0.50	Radius R (mm):

3.98	Specific Gravity (g/cm³):
0.50	Thickness (mm):
300,000	Compressive Strength (psi):
±2.54	Diameter Tolerance (µm):

Optical Properties

Sapphire (Al ₂ O ₃)	Substrate: ☐
Uncoated	Coating:
1.77	Index of Refraction (n _d):
0.64	Sphericity (µm):

Environmental & Durability Factors

2053.00	Melting Temperature (°C):
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Regulatory Compliance

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

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](#).

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

