

## Spherical Mirrors

- Chromatic aberration free for concentrating, collecting, and imaging applications
- Aluminum overcoated with  $MgF_2$  for high durability
- Polished rear surface for easy mounting
- Standard diameters from 15 to 50.8mm

These mirrors are used for laser beam concentration and quality imaging. They can also be used to improve the light output from projection and illumination systems. All spherical mirrors have a focal length equal to half their radius of curvature. The front concave spherical section is polished on a BK7 substrate and then coated with aluminum and  $MgF_2$ .

Mirrors are offered in several sizes with a wide range of curvatures from 10mm to 4m. Other diameters, diameters greater than 50.8mm, and other radii of curvature are also available. Please call.



## Specifications & Tolerances

Spherical tolerance:  $\lambda/2$

Surface quality: 40-20

Radius of curvature:  $\pm 2\%$

Thickness:  $\pm 0.2\text{mm}$

Durability: to MIL-C-675

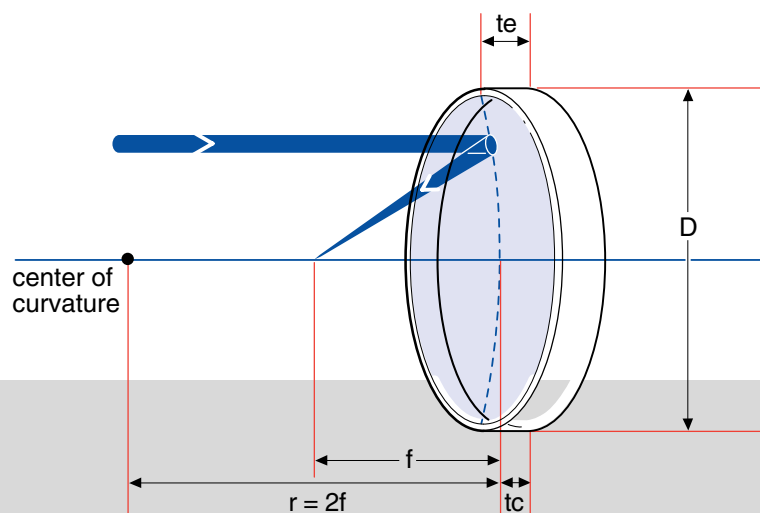
Reflectance:  $R > 85\%$  (400-1550nm)

Diameter: +0, -0.2mm

Clear aperture:  $> 85\%$  diameter

Bevel: 0.2mm x  $45^\circ$  typical

Material: BK7

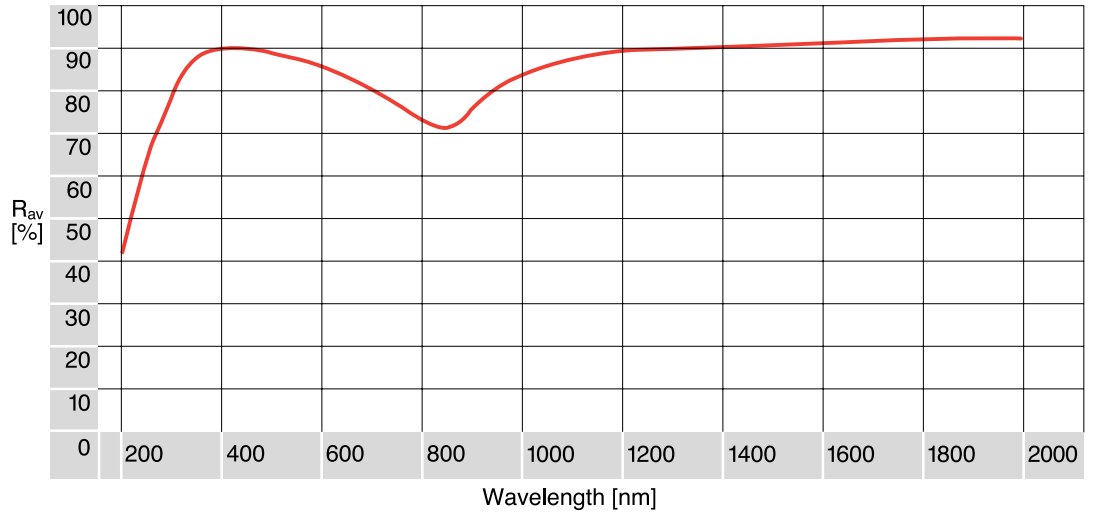


SPHERICAL MIRROR

ORDERING  
&  
TECHNICAL SUPPORT  
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sales@optosigma.com  
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**OPTICAL COMPONENTS**

- Spherical Lenses
- Cylindrical Lenses
- Lens Kits
- Achromatic Doublets
- Multi-Element
- Micro Optics
- Mirrors**
- Prisms
- Substrates & Windows
- Beamsplitters
- Polarizers
- Filter & Apertures



**ALUMINUM COATING REFLECTIVITY**

Al + MgF<sub>2</sub>

**Spherical Mirrors**

Radius of Curvature, r (mm)	Diameter, D (mm)	Edge, te (mm)	Center, tc (mm)	Price	PART NUMBER
10	15.0	7.0	3.6		035-0100
20	15.0	5.0	3.5		035-0102
30	15.0	5.0	4.0		035-0104
40	15.0	5.0	4.3		035-0105
50	15.0	5.0	4.4		035-0106
50	25.0	7.0	5.4		035-0120
50	25.4	7.0	5.4		035-0130
50	50.0	13.0	6.3		035-0140
50	50.8	13.0	6.3		035-0150
100	15.0	5.0	4.7		035-0158
100	25.0	5.0	4.2		035-0160
100	25.4	5.0	4.2		035-0170
100	50.0	10.0	6.8		035-0180
100	50.8	10.0	6.8		035-0190
250	15.0	5.0	4.9		035-0198
250	25.0	5.0	4.7		035-0220
250	25.4	5.0	4.7		035-0230
250	50.0	8.0	6.7		035-0240
250	50.8	8.0	6.7		035-0250
500	15.0	5.0	4.9		035-0258
500	25.0	5.0	4.8		035-0260
500	25.4	5.0	4.8		035-0270
500	50.0	8.0	7.4		035-0280
500	50.8	8.0	7.4		035-0290
1000	15.0	5.0	5.0		035-0298
1000	25.0	5.0	4.9		035-0330
1000	25.4	5.0	4.9		035-0340
1000	50.0	8.0	7.7		035-0350
1000	50.8	8.0	7.7		035-0360
2000	15.0	5.0	5.0		035-0368
2000	25.0	5.0	5.0		035-0390
2000	50.0	8.0	7.8		035-0450
4000	15.0	5.0	5.0		035-0458
4000	25.0	5.0	5.0		035-0490
4000	50.0	8.0	7.9		035-0560

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