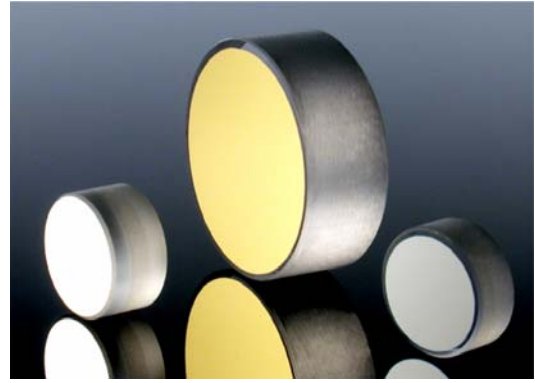
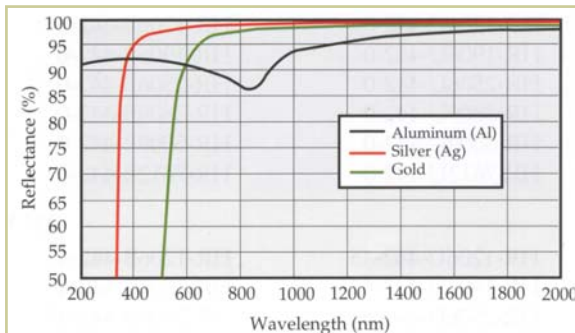


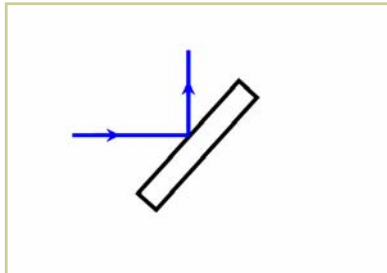
Metallic Coated Mirrors



Metallic coatings are excellent broadband reflectors. Aluminium, silver or gold may be used. Aluminium has the broadest bandwidth extending from 200 nm to the near IR. Silver has the highest average reflectance and gold reflects well at longer wavelengths but cuts off at about 500 nm giving rise to its distinctive colour.



As metal coatings are prone to oxidation, they are normally protected with a thin layer of silicon dioxide. If a multi-layer stack is used instead of a simple dielectric layer, it is possible to enhance the reflectance of metallic mirrors. 'Enhanced' metal mirrors should be selected when the highest reflectance is required.



The average reflectance of metallic mirrors is:

Coating Type	UV	Vis	NIR
Protected Aluminium	85%	90%	94%
Protected Silver	---	97%	99%
Protected Gold	---	---	98%
UV Enhanced Aluminium	93%	90%	90%
Vis Enhanced Aluminium	---	93%	90%
Enhanced Silver	---	99%	98%
Enhanced Gold	---	99%	98%

Substrate material is usually BK7A optical glass. Metallic mirrors can be produced on flat or curved substrates as required. Unless otherwise requested we will supply them on $\lambda/10$ polished flats with a surface quality of 10/5 or better. Metallic mirrors are available in diameters of 10.0, 12.7, 19.1, 20.0, 25.4, 30.0, 38.1 or 50.8 mm or any custom size.

Typical Specifications	
Substrate Material:	BK7
Surface flatness:	$\lambda/10$ @ 633 nm
Surface quality:	10/5
Parallelism:	< 3 arcmin
Diameter:	+0.0 / -0.2 mm
Thickness:	\pm 0.25 mm
Clear aperture:	> 85% of diameter
Durability:	ML-C-675

To request a quote or to order, please specify:

Quantity — Diameter — Coating Type — Wavelength Region (UV, Vis, NIR)

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For a quotation — please phone, fax or email us with details of your requirements.