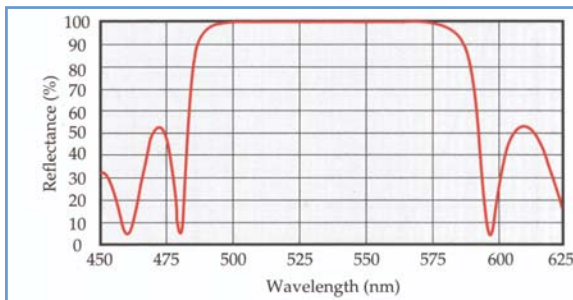


Laser Cavity Mirrors

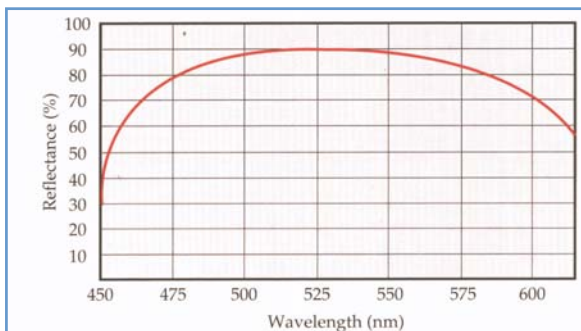


Mirrors for use inside a laser cavity must be precisely manufactured, free from defects, and have specific reflectance coatings. The resulting mirror must have a high laser damage threshold.

Rear cavity mirrors require a high reflectance (typically 99% or 99.5%) at the laser wavelength,



while output couplers need to transmit a percentage of the incident light as the output beam while reflecting the rest (typically 70%, 80%, 90%, 95%)

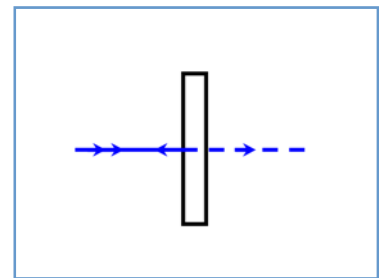


into the cavity. These mirrors are made for use at normal incidence.

Both substrate and coating have an equally important effect on the performance of a cavity mirror.

Substrate material depends on the wavelength of operation. Polish, stability and scatter must be controlled as well as precise reflectance characteristics.

Laser cavity 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.

We can provide intra-cavity optics in diameters of 12.7, 25.4, 38.1 or 50.8 mm or any custom size for a wide selection of laser types.

Typical Specifications	
Substrate Material:	CaF2, UVFS, BK7, IRFS, ZnSe
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
Damage Threshold:	> 5J/cm ² , 10 ns
Durability:	MIL-C-675

To request a quote or to order, please specify:

Quantity — Substrate Material — Diameter — Laser Type & Wavelength — Reflectance

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