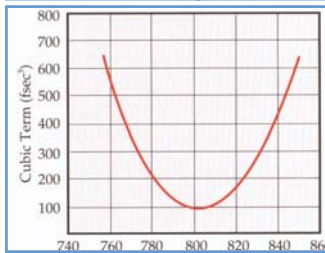
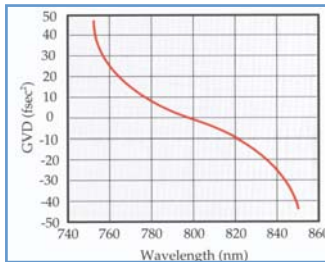


Ultra-fast Reflectors



Lasers utilizing media such as Ti:Sapphire or LiSAF have a broad spectral bandwidth and an ability to emit pulses of ultra-short duration.

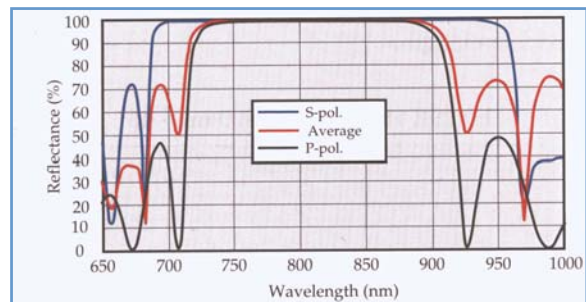
When working with ultra-fast lasers it is necessary to pay attention to bandwidth reduction dispersion broadening introduced by optical elements in the



system. Mirrors used must have a high reflectance over a broad bandwidth. They must also be designed to have a low phase shift, group velocity dispersion and not to introduce significant levels of cubic and higher order terms.

Coatings are usually highly dispersive elements but a combination of careful design and controlled deposition can yield high reflectors suitable for use with ultra-fast lasers.

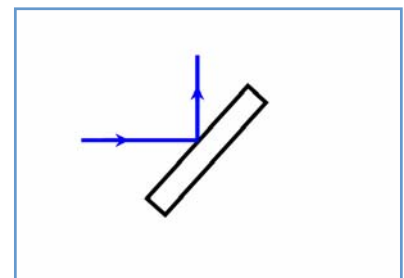
These ultra-fast reflectors operate over a broad



bandwidth from 730-800 nm and provide greater than 99.5% reflectance over this range. They have a linear phase response and low levels of high order terms as shown.

Either normal incidence or 45° reflectors can be supplied on a range of substrates from 12 to 76 mm diameter.

Typical Specifications	
Substrate Material:	BK7 grade A
Surface flatness:	$\lambda/10$ @ 633 nm
Surface quality:	10/5
Parallelism:	< 3 arcmin
Diameter:	+0.0 / -0.2 mm
Thickness:	+/- 0.25 mm
Clear aperture:	> 85% of diameter
Reflectance:	R > 99.5%
Damage Threshold:	> 5J/cm², 10 ns
Durability:	MIL-C-675



To request a quote or to order, please specify:

Quantity — Diameter — Center Wavelength — Angle of Incidence

Optarius

PO Box 2271
Malmesbury SN16 9FA
United Kingdom

Optics for Lasers

Phone: +44 1666 575185
Fax: +44 1666 577424
Email: optarius@optarius.com
Web: www.optarius.com

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