

## Dispersion Compensating Fibers, Ultra-Broadband Dispersive Mirrors



### DESCRIPTION

Cycle stocks a variety of specialty dispersion management components, which are available with short leadtimes, and with no minimum order quantities. These include:

- Connectorized dispersion compensated fiber modules
- SM and PM dispersion compensating fibers
- Ultra-broadband dispersive mirror pairs
- Custom-designed chirped mirrors

We are happy to offer dispersion-matched SM and PM fiber modules with customized fiber lengths, and custom-designed ultrafast chirped mirrors. Please contact us for more information.

### ULTRA-BROADBAND DISPERSIVE MIRRORS\*

Parameter	Value
Design	13774
Coating type	IBS
Wavelength range	470 – 940 nm
Reflectance over the wavelength range	>99.5% over wavelength range
Available sizes (diameter x thickness)	Ø50 mm x 12.5 mm Ø25 mm x 6.35 mm Ø12.7 mm x 6.35 mm
GDD per reflection	-40 fs <sup>2</sup>
Surface flatness	0.4 λ at 633 nm over 20 mm
Wedge	<5'
Angle of incident	3° p-polarized

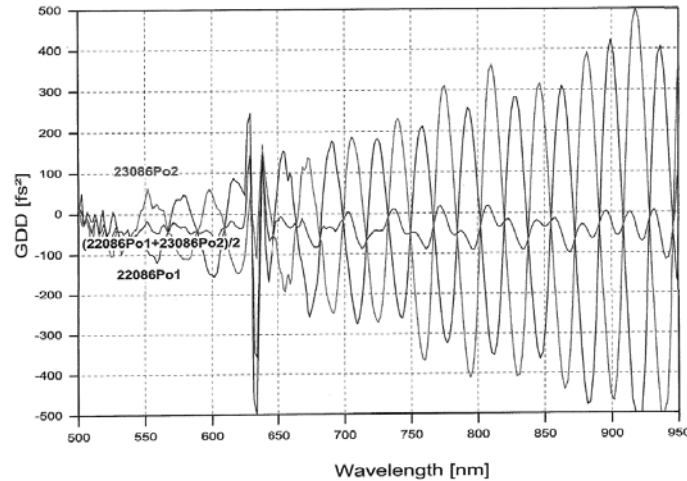
\*mirror design licensed from DESY

**FLIP OVER FOR GDD and TRANSMISSION GRAPHS, AND DCF FIBERS**

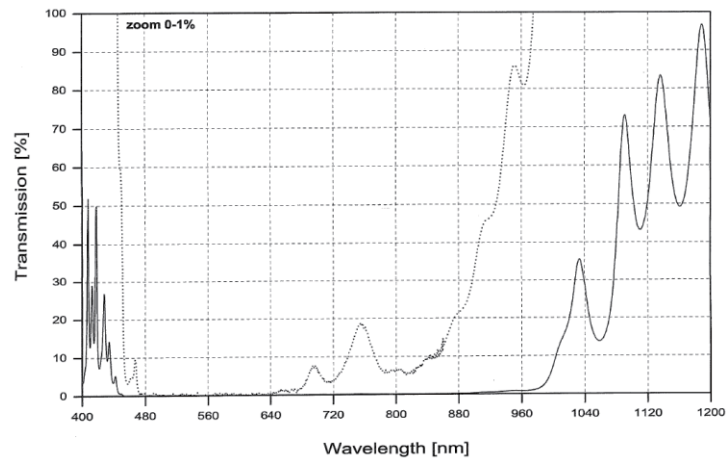
# DATA SHEET



Group Delay Dispersion vs. Wavelength:



Transmission vs. wavelength (dotted curve shows transmission between 0 and 1%):



## PM AND SM DISPERSION COMPENSATING FIBERS



Parameter	SM-DCF	PM-DCF	Unit
Operating Wavelength	1550		nm
MFD	5	5	μm
Attenuation @1550nm	<0.6	<0.5	dB/km
Dispersion Coefficient @1550nm	-100 ~ -170	-90 ~ -110	ps/ (nm km)
Cladding Diameter	120 ± 10	125 ± 2	μm
Coating Diameter	245 ± 10	250 ± 10	μm
Jacket Type	3mm PVC, see above	None/ bare fiber	

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