## be Scientific

Thin Film Optical Filters for Femtosecond Laser

# **Chirped Mirror**



#### **Features**

- A femtosecond pulse laser beam will spread and become chirped, and the peak intensity becomes small when transmitting the pulse through optical components.
- Light reflected from the deeper layers of the mirror travels longer distance than the light that reflects off the surface layers. And different wavelengths arrive dispersed in time.
- Precise coating process of IBS or IAD may achieve high performance mirror.

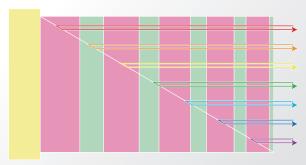
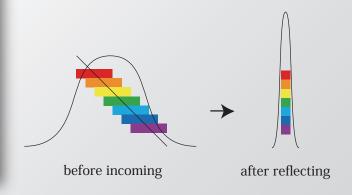
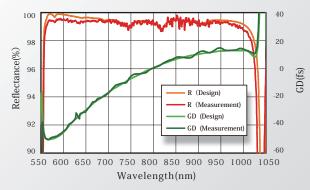


Image of dispersion compensation by chirped mirror

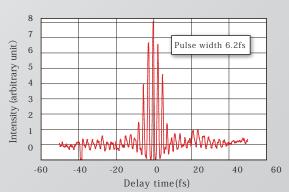


#### Spectral property (a pair of 2 mirrors)



GD:Group Delay ∼ staytime in mirror

### Autocorrelation



Measured by Hishikawa lab @ IMS, JAPAN





