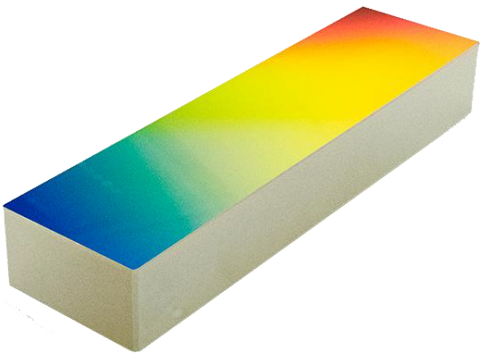
Diffraction Gratings for Pulse Compression



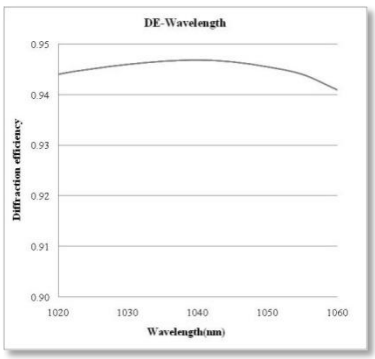
- Material from DUV to IR
- Custom dimension and shapes
- Grating type: Plano grating
- Line density: 1700line/mm
- Line density tolerance: ± 0.5 line/mm
- Wavelength range: 1020-1050nm
- Central wavelength: 1040 nm
- Angle of incidence(AOI): Littrow incidence
- Optical polarization: TM
- Diffraction efficiency: ＞94.0%
- Clear aperture: >90%
- Wavefront distortion: λ/4@632.8nm
- Surface quality: 40-20 S/D
- Parallelism:＜ 0.1°
- Coating: Au layer

CPA technique is widely used for generation of ultra-short and high energy pulse of lasers. Grating is one of the most critical components in the pulse stretch and compression system to determine their performance.

CASTECH's reflection grating has been successfully applied on pulse compression, which is created by our unique holographic exposure, iron etching and replication technique. The grating delivers low scattering, high diffraction efficiency and features in extreme competitive pricing as well.

Customized solution is available from prototype building to high volume production.

Metrology



DE of Pulse Compressed Grating

Agilent Tunable Laser

Diffraction Efficiency Testing System