

## **Silver Mirrors**



Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual Stages

**Actuators & Adjusters** 

Motoeized **Stages** 

Light Sources & Laser Safety

Index

Guide Mirrors

**Beamsplitters** 

**Polarizers** 

**Multi-Element Optics** 

**Filters Prisms** 

Substrates/Windows

**Optical Data** 

Maintenance

**Selection Guide** 

Super Mirror

Femtosecond Laser Frameless

**Accuracy Guarantee** 

**High Power** 

**Ultra Broadband** 

**Dielectric Coating** 

**Aluminum Coating** 

**Gold Coating** 

Silver (Ag) coated mirrors have high reflectance over a broad range from visible to infrared wavelengths.

Since it is coated with a protective layer on the silver, it can be used long-term without oxidation.

- For the wavelength range from the visible to infrared, higher reflectance than aluminum mirror can be obtained.
- Incident dependence is smaller than the dielectric multilayer coating, it can use at various incident angles.
- Since it is coated by protective layer, a scratch hardly occurs even if it is rubbed with a cloth.



# **Schematic** Rear surface: Ground or Polished Front surface: Ag + Dielectric multi-layer coating

Outline Drawing	(in mm)
φD	●Tolerance Diameter $\phi$ D:0.5 Thickness t±0.1

Specifications	
Material	BK7
Coating	Ag + Dielectric multi-layer coating
Wavelength Range	450 – 2000nm
Reflectance	> average 97.5%
Surface Flatness	λ/10
Parallelism	<3′
Surface Quality (Scratch-Dig)	40–20
Clear aperture	90% of Actual Aperture

### Guide

▶ Please contact our Sales Division with your customized products requests.

### Attention

- ▶ For long-term storage, please use a de-oxidizer to prevent the oxidation of the silver.
- ▶ When a laser is transmitted with multiple mirrors installed, there will be a loss of the amount of light caused by the absorption of the silver coating. Please use 0-45° Wide incidence dielectric mirrors (TFVM) for improved performance.
- ▶ Reflectance specification is represented by the average of the reflectance of P polarized light and S polarized light. Reflectance may vary depending on the polarization state of the incident beam.

Specifications				
Part Number	Diameter φD [mm]	Thickness t [mm]	Rear Surface	
TFAG-12.7C05-10	φ12.7	5	Ground	
TFAG-25.4C05-10	φ25.4	5	Polished	
TFAG-30C05-10	φ30	5	Polished	
TFAG-50C08-10	φ50	8	Polished	
TFAG-50.8C08-10	φ50.8	8	Polished	

