

Pellicle Beamsplitters

Optics

Lenses & Microscope Components

Coatings

Mirrors, Beamsplitters & Windows

Prisms & Polarizers

Filters

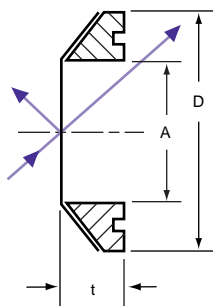
Pinholes

- *Extra thin construction*
- *Elimination of second surface reflections*
- *Elimination of refraction displacement errors*



These Pellicle Beamsplitters are ideally suited to laser sampling. Their versatile mounting and light weight construction make them an effective high-quality window, or high-resolution mirror.

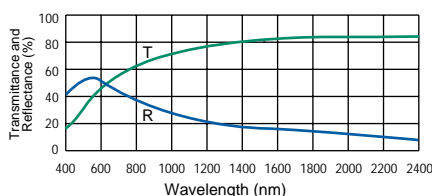
The pellicle itself is a delicate, elastic membrane of nitrocellulose mounted on an optically flat aluminum alloy frame. The pellicle is stretched taut over the lapped edges of the frames, ensuring surface flatness. The pellicle thickness is 2 μm and exhibits a thickness uniformity of 2 wavelengths per 25 mm.



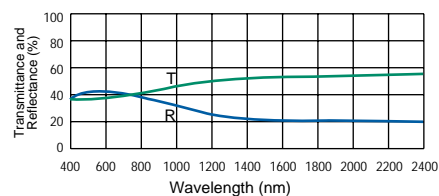
The major advantage of pellicle beamsplitters is elimination of second surface reflections. This is because the membrane is so thin that reflections from the front and back surfaces are essentially superimposed.

Representative curves for each type are provided. Three different sizes are available for each type.

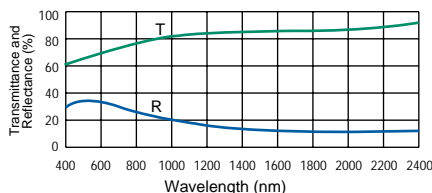
Coated 50/50 for 633 nm



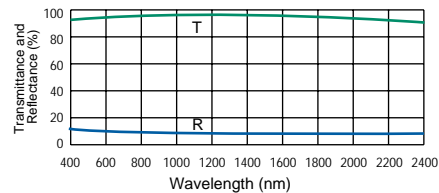
Coated 40/40 for 633 nm



Coated 67/33 for 633 nm



Uncoated 90/10 for 633 nm



Pellicle Beamsplitters

Catalog Number	Split Ratio T/R at 633 nm	Aperture, A (mm)	Frame Diameter, D (mm)	Frame Thickness, t (mm)
44-3960	50:50	25.4	34.9	4.8
44-3978	50:50	50.8	63.5	6.4
44-3994	67:33	25.4	34.9	4.8
44-4000	67:33	50.8	63.5	6.4
44-4026	40:40	25.4	34.9	4.8
44-4034	40:40	50.8	63.5	6.4
44-4059	90:10	25.4	34.9	4.8
44-4067	90:10	50.8	63.5	6.4

Specifications

Material: Nitrocellulose

Diameter Tolerance: +0 -0.5mm

Thickness: 2 μm

Uniformity: 1 λ /25 mm

Surface Quality: 40-20

Useful Temperature Range: -40 to 70°C

Damage Threshold: 2 W/cm²

Opto-mechanics

Tables, Breadboards & Rails

Mounting Hardware

Mirror & Component Mounts

Manual Micro-positioners

Motorized Positioners

Lasers & Accessories

Beam Delivery

Laser Measurement

Diode Laser Modules