

## 50.8mm Clear Aperture 45R/55T, Infrared Pellicle Beamsplitter



Infrared (IR) Pellicle Beamsplitters

Stock **#19-282** **2 In Stock**

⊖ 1 ⊕ **S\$611<sup>00</sup>**

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### Volume Pricing

Qty 1-10	<b>S\$611.80</b> each
Qty 11-25	<b>S\$520.80</b> each
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### Product Downloads

#### General

Pellicle Beamsplitter **Type:**

#### Physical & Mechanical Properties

50.8 **Clear Aperture CA (mm):**

Pellicle **Construction:**

**Diameter (mm):**

63.50

Black Anodized Aluminum

Housing:

Thickness ( $\mu\text{m}$ ):

2 +0.3/-0.2

## Optical Properties

Dielectric

Coating:

45/55 @ 3000 - 5000nm

Coating Specification:

Index of Refraction ( $n_d$ ):

1.5

Reflection/Transmission Ratio (R/T):

45/55

Substrate:

Nitrocellulose

Surface Quality:

40-20

Wavelength Range (nm):

3000 - 5000

## Threading & Mounting

Mount Thickness (mm):

6.35

Mounting Threads:

2-56

## Regulatory Compliance

Compliant

RoHS 2015:

View

Certificate of Conformance:

Compliant

REACH 241:

## Need different specs or modifications?

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).

## Product Details

- 45/55 Average R/T Ratio from 3 - 5 $\mu\text{m}$
- No Ghost Images from Second Surface Reflections
- Eliminate Beam Displacement
- [Pellicle Beamsplitters](#) for the VIS-NIR Also Available

Infrared (IR) Pellicle Beamsplitters feature thin nitrocellulose beamsplitting membranes mounted in aluminum frames and are designed to have a 45R/55T beamsplitting ratio from 3 - 5 $\mu\text{m}$ . The thin nitrocellulose membranes eliminate second surface reflections and beam displacement while minimizing changes in the optical path length. The aluminum frames feature mounting holes on the underside of the frame to facilitate mounting and integration into OEM systems. Infrared (IR) Pellicle Beamsplitters are ideal for MMR applications including MMR imaging, infrared spectroscopy, flame detection, and general use with infrared detectors.

**Note:** The nitrocellulose membrane of these beamsplitters is very thin and fragile. The membrane should not be touched and cleaning should be done only with air. We recommend using an [air blower](#) as the force from compressed air may damage the membrane.

## Technical Information

