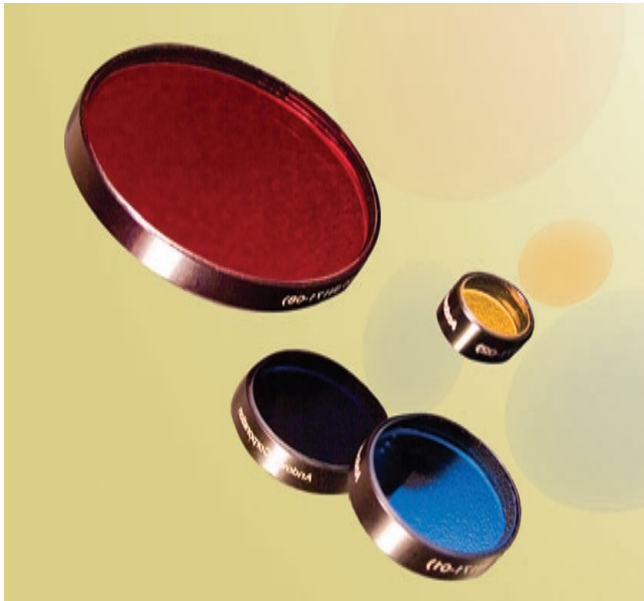




## Quality Optical Filters



### Exceptional Reliability

Andover's filters and coatings far exceed the industry standard for quality. This precision reflects the fact that Andover Corporation is among the only optical filter manufacturers to design their own state-of-the-art equipment and to control the entire production process.

### Extensive Standard Offering

Andover maintains an inventory over 1,000 different optical filters. Bandpass, dichroic, edge, heat control, and calibration filters are just a few of the product categories that are in stock and ready for immediate shipping.

### Custom Design Expertise

The engineers at Andover can meet your most demanding requirements for custom filters and coatings. Over more than 30 years in business, we've designed products for such advanced applications as medical instrumentation, fluorescence studies, machine vision, astronomical observation, telecommunications, and space-borne and defense systems. Attention to Service Flexibility is the hallmark of our company. Our highly experienced technical sales staff will help you get the products you need at the right time and the right price. And when you call Andover, you can be confident that a knowledgeable staff person will always be available to answer your questions.

### Extras Making the Difference

Unlike most optical filter manufacturers, we supply exact spectral curve data with all orders at no additional charge, saving you the cost of incoming quality control. We'll even help you reduce inventory by shipping your order only when you require it.

### Frequently Asked Questions

#### ■ How do you distinguish between an image quality and a commercial quality filter?

*Image quality filters are ideal for applications that require high resolution, such as astronomical observations. To make these products, we fabricate high-quality optical glass to ensure the substrate is extremely flat and parallel, and then apply antireflective coatings on the external surfaces to reduce ghost images and maximize energy throughput. Commercial quality filters can have the same spectral characteristics as image quality filters, but they are designed for use in instruments rather than imaging applications. (See page 26 for details.)*

#### ■ What do I need to do to maintain my filters in good condition?

*We recommend cleaning your filters about every three months. If the environment is particularly dusty or you often shift the filters between applications, more regular cleaning may be warranted. We suggest that you apply acetone, methanol, or alcohol to a soft tissue and then rub the filter using a circular motion.*

#### ■ Are there any particular environmental conditions to consider when using a filter?

*It's important to avoid prolonged exposure to high humidity and large temperature variations. To reduce the risk of damage due to thermal shock, we recommend a maximum operating temperature of 70°C and a maximum temperature change of 5°C per minute.*

#### ■ Does it matter which way I mount a filter?

*As a rule, the highly reflective (shinier) side of the filter should face the source of radiation. This minimizes the thermal load on the absorbing glass blocking components and epoxies, extending the life of the filter.*

#### ■ When placing an order, why do I need to include the operating temperature?

*The center wavelength of an interference filter shifts linearly with changes in ambient temperature. Our filter designs take this into consideration to ensure proper performance at your specific operating temperature.*