

Infrared Optics

Coatings & Capabilities

FNIR-BBAR / FNIR

Our Infrared Neutral Density (FNIR) filters are now available with a back-surface anti-reflection coating as an additional option. The standard FNIR filters consist of an attenuating film on one side of a Germanium substrate leaving the other surfaces uncoated. Both the attenuating surface and the uncoated Germanium surface are partially reflective. The back-surface anti-reflection coating lowers the reflection of the uncoated surface, thereby greatly reducing the intensity of one of the interfering beams, and effectively disabling the etalon effect. Perfect for imaging applications.

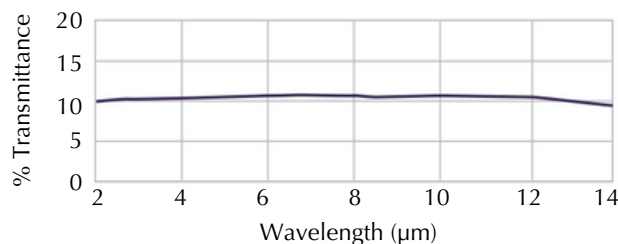


Standard Infrared Bandpass Filters

Andover offers a competitive line of standard infrared bandpass filters. We offer our standard infrared bandpass filters in narrow or wide bandwidths and they can be custom-fabricated to suit your specific requirements.



Typical 1.0 ND Filter



Custom Infrared Coatings

Andover Corporation offers custom infrared optical coatings on a variety of substrates in various shapes and sizes to function as AR coatings, bandpass, long and short pass, dichroics, and more. While generally operating at 0 to 45, the coatings can be optimized for any particular angle or range of angles of incidence. Some of our specialized custom infrared optical coatings include High Angle AR's, Dichroic Beamsplitters, and Ultra-Narrowband Filter.



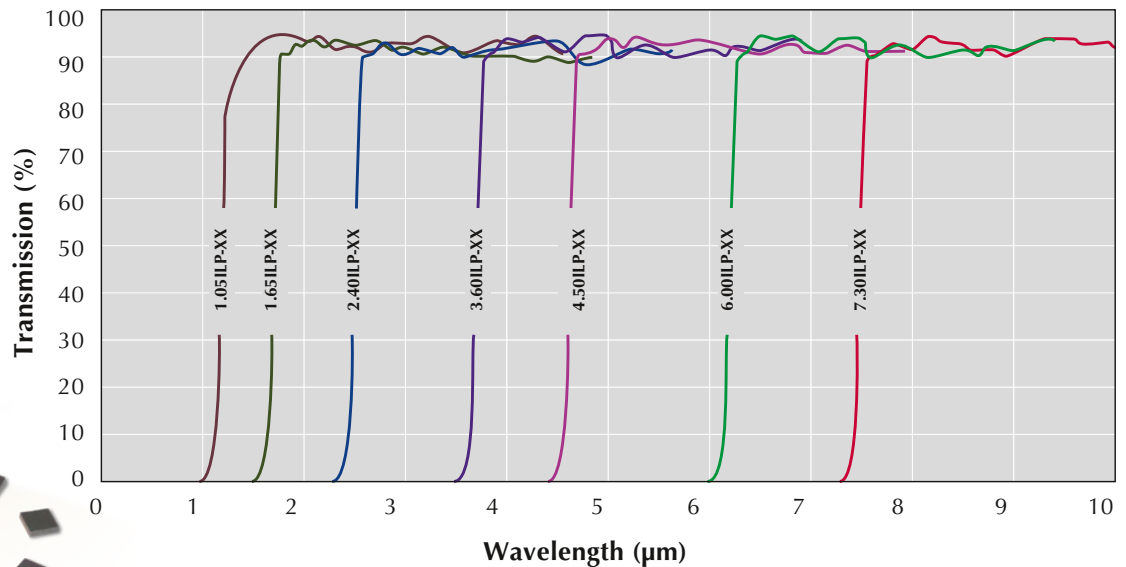
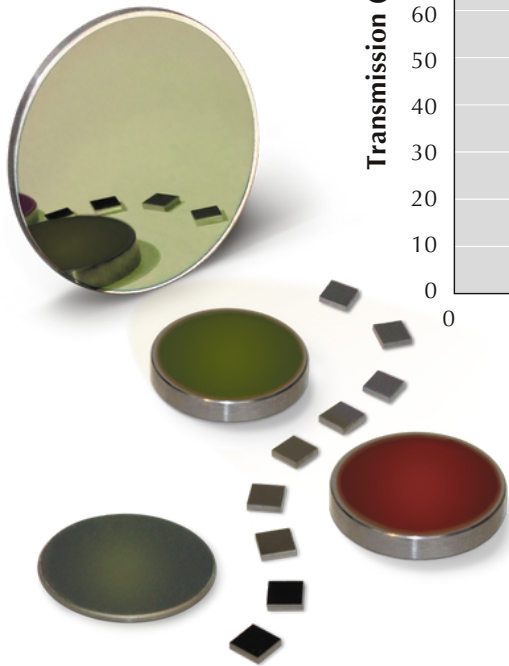
Common IR Applications:

- Infrared Astronomy
- Surveillance and Targeting
- Thermal Imaging
- Cube satellite global monitoring
- Weapons Systems
- Air/Water/Gas Analysis
- Detector and Dewar Windows
- IR Photography



Long Wave Pass

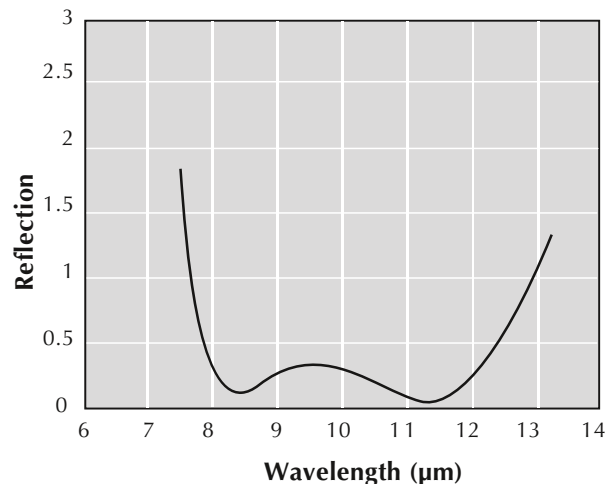
Infrared Filters



Andover Corporation's infrared long wave pass filters provide a sharp cut-off and high optical density. Often used for order sorting, they isolate broad regions of the spectrum, simultaneously providing high transmission of desired energy, and deep rejection of unwanted energy.

Broad Band Anti-reflection Coatings (BBARs)

Andover Corporation produces a non-radioactive dielectric multilayer coating designed to reduce the reflection of Germanium, Silicon, and other IR substrates. For Germanium substrates, reflection is reduced from 36% per surface to less than 1%. All our Broad Band Anti-reflection coatings (BBARs) are customizable to size and range. Coating services on customer supplied substrates available with 2-3 week turnarounds.



Dicing Services

Andover Corporation offers dicing services for all of our Infrared products, with sizes as small as 2.0mm squares. Our dicing unit can accommodate up to a 305mm Ø plates. Parts can be delivered on tape or picked and package as required. Diced Infrared parts are commonly used in the gas detector and small satellite industries. Prototyping and quick turn delivery are available.

