Custom Optical Coatings & Filters for Photonic Devices

KEY FEATURES

- Multiple filter materials (sapphire, Ge, Si, CaF_2, thin-film coatings)
- Band-pass and long-pass optical filters tailored to application
- Broad spectral coverage: EUV to long-wave IR

APPLICATIONS

- EUV lithography and soft X-ray metrology
- Night vision and IR illumination systems
- Biomedical and analytical instruments
- Environmental and industrial sensors

Opto Diode designs and manufactures custom optical filters and coatings for photodiodes, IR detectors, and emitters across industries including defense, aerospace, industrial, medical, and scientific research. These solutions are engineered to meet customer specifications, covering wavelengths from EUV and soft X-ray through visible and deep infrared.

Our filter-integrated devices enhance sensitivity, block unwanted light, and can be matched to specific light sources such as LEDs and lasers. We offer band-pass, long-pass, and attenuation filters directly integrated into our detectors and emitters, enabling precise spectral targeting. Devices are available in hermetic packages and can be fully tested to meet demanding environmental standards.

In addition to standard configurations, Opto Diode offers application-specific customization, such as filters optimized for EUV lithography power monitoring, IR gas sensing, and multi-wavelength detection assemblies for biomedical and industrial systems. With U.S.-based wafer fabrication and thin-film coating capabilities, we deliver traceable, high-reliability components that meet rigorous performance standards for mission-critical and research-driven applications. By leveraging our decades of expertise, customers gain access to tailored optical solutions that improve accuracy, stability, and overall system performance.

Featured Products

High Performance PbSe

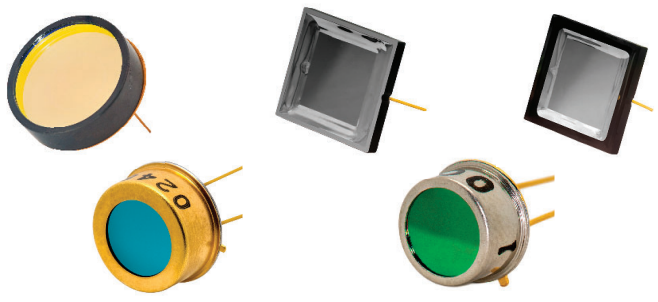
Model Number	Package Type	Window Type	Description
BXP-35F	TO5	2.4 µm Longpass Ge Filter	Uncooled Packaged Infrared Detector
BXT2-17TF	TO37	Flat Sapphire	Two Stage Cooled Package Infrared Detector

Filtered VUV photodiodes

Model Number	Detection Range	Active Area	Description
SXUV100TF135	12 nm to 18nm	10 mm x 10 mm	Photodiode with Integrated Filter
AXUV100TF400	18nm to 80nm	10 mm x 10 mm	Photodiode with Integrated Filter

Custom EUV Filters

Custom EUV filters use thin-film coatings to target precise wavelengths, such as 13.5 nm for lithography or soft X-ray bands from 1 nm to 80 nm. They provide high transmission in the desired band while blocking out-of-band light, and can be integrated with EUV photodiodes or supplied standalone for lithography, metrology, and research systems. detection solutions or provided as standalone components for metrology, lithography, and scientific research systems.



Learn more about our custom optical coating and filter solutions at **www.optodiode.com.**