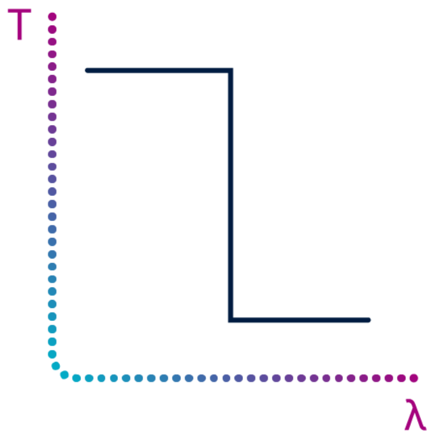
Dichroic Beam Splitter

Beam splitters are optical components used to split an incident beam of light into two beams. They are used when light of a certain wavelength or a defined spectral range is to be separated into a reflected (R) and a transmitted (T) component.

Beam splitters can also be used according to the reverse principle to bundle two different beams into a single beam.

Dichroic beam splitters split the incident light into long-wave and short-wave radiation according to wavelength. For example, short-wave radiation is transmitted while long-wave radiation is reflected (or vice versa). Dichroic beam splitters are also known as short-pass or long-pass filters. They fulfill narrow spectral tolerances and can be created with a specific spectral transition zone between the reflecting and transmitting wavelength range. Dichroic beam splitters are manufactured with an alternating layer structure, i.e. alternating low-refractive and high-refractive dielectric layers are applied.



Applications

Fluorescence spectroscopy/microscopy, measurement and sensor technology, image processing (automation technology)

Substrates

Glass (Borofloat n_d=1.52, B270, float glass, etc.), plastic (Zeonex, PC, PMMA with hard coating,...)

Consistency (for example)

Abrasion: DIN ISO 9211-1-04
Adhesive strength: DIN ISO 9211-2-03
Moist heat: DIN ISO 9211-5-03
Temperature: over 200°C
More on request.

Do you need other specifications?

Contact us:

sales@bte-born.de

Principal curve long-pass filter

Long-pass filters transmit wavelengths above a certain cut-off wavelength.
Example: Cut-on wavelength 700nm, AOI = 45°