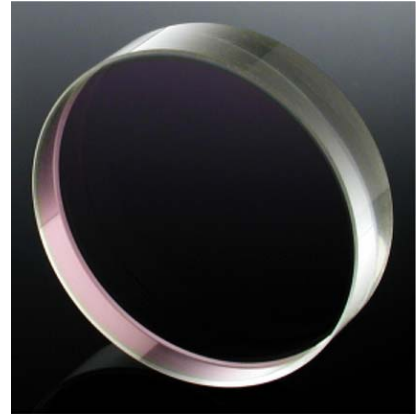
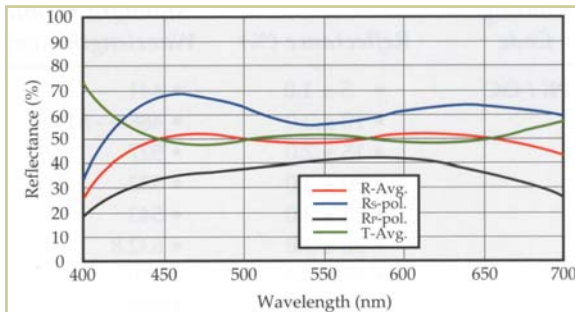


Broadband Plate Beamsplitters



These dielectric plate beamsplitters are multilayer coated to have an equal split ratio $50 \pm 5\%$ over a broad spectral range. As a result they are sensitive to polarization. The s- and p- polarization states are reflected in different intensities but their combination provides equal transmission and reflection.



Four separate wavebands are available:

Visible 460 – 650 nm centred at 550 nm

Near IR 650 – 950 nm centred at 800 nm

Near IR 950 – 1250 nm centred at 1100 nm

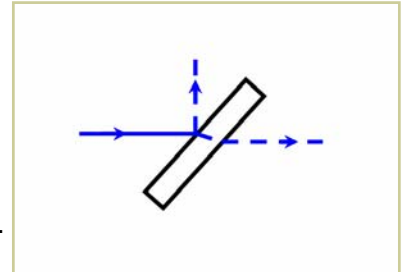
Telecom 1250 – 1650 nm centred at 1400 nm

Substrate material can be UV Fused Silica or BK7A optical glass. Polish, stability and scatter are controlled as well as the precise reflectance of the multilayer dielectric coating.

In order to maintain a 50% split, the rear surface is anti-reflection coated to achieve $R < 0.5\%$ for the waveband of interest.

Broadband plate beamsplitters are normally produced on $\lambda/10$ polished flats with a surface quality of 10/5 or better. However, where flatness is not so important, thinner substrates can be used. We therefore offer $2\lambda/25\text{mm}$ versions as well.

Broadband plate beamsplitters can be supplied in diameters of 25.4, 50.8, 76.2 mm, as 50.8mm squares or in any custom size.



Typical Specifications	
Substrate Material:	UVFS, BK7
Surface flatness:	$\lambda/10$ @ 633 nm
Surface quality:	10/5
Parallelism:	< 3 arcmin
Diameter:	+0.0 / -0.2 mm
Thickness:	± 0.25 mm
T:R ave	50:50 $\pm 5\%$
s-p :	$< 30\%$
AR Coating:	$R < 0.5\%$
Damage Threshold:	$> 3 \text{ J/cm}^2$, 10ns
Clear aperture:	$> 85\%$ of diameter
Durability:	MIL-C-675

To request a quote or to order, please specify:

Quantity — Substrate Material — Diameter — Waveband

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For a quotation — please phone, fax or email us with details of your requirements.