Optical filters for light sources
Heat reflecting filter

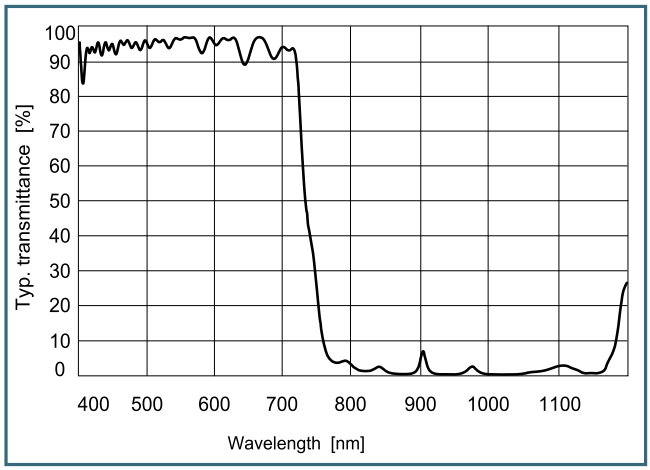
- *High flat VIS transmission*
- *High IR reflection up to 1150 nm*
- *Operating temperature up to 400 °C*

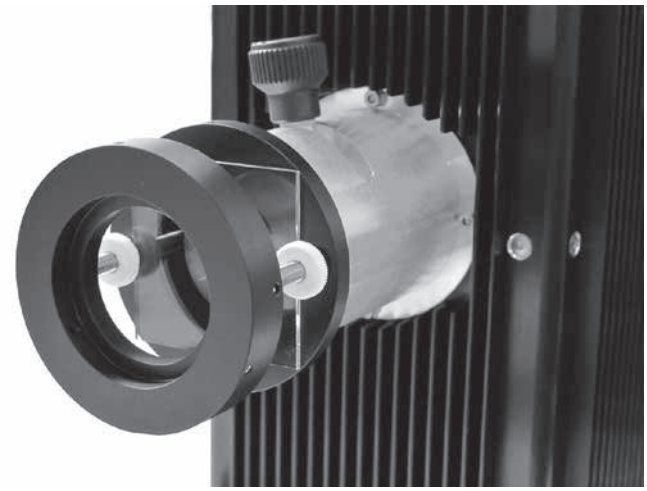
This non-absorbing filter transmits the VIS while reflecting the heat-generating NIR.
If only the VIS radiation of a light source is required this might be an alternative to the heat absorbing water filter.

The filter is typically used at normal (0°) incidence to the source of radiation. In this position, the VIS radiation is passed without deviation while the NIR is reflected back to the light source.

Because of its all dielectric coating construction and the heat-resistant borosilicate glass substrate this filter can be used at high operating temperatures of up to 400 °C.
We found no damage in the collimated beam of our light sources up to 1000 W.

When used at 45° the transmittance reflectance curve is shifted towards shorter wavelengths. For higher rejection of IR use colored, heat-absorbing glass filters. The VIS transmittance is the output of both filters.





Specifications	
Thickness:	1.75 mm
Size:	50 x 50 mm² (±0.5 mm)
Substrate material:	Borosilicate glass
Surface quality:	80 - 50 (MIL-0-13830A)
Flatness:	1 - 3 λ/25 mm @633 nm
Max. operating temperature:	up to 400 °C
Average transmittance[1)]:	≥ 90% @400 - 700 nm
Average reflectance:	≥ 90% @800 - 1150 nm
[1)] Note: there is residual transmittance in the UV (280 - 360 nm) and IR (1200 - 3500 nm).	

Ordering information

800FHR50S	Heat reflecting filter

Quantum Design

Quantum Design
1 avenue de l'Atlantique
Bâtiment Mac Kinley
91940 Les Ulis - France

Stéphane Marin
Tél. : +33 1 69 19 49 49
Mail : marin@qd-europe.com
www.qd-europe.com/fr/fr/