8.1 Edge filters (hard coatings by reactive ion plating or ion assisted evaporation)

Type	KIF/LIF
Spectral values	
Edge wavelength λ_c (τ = 0.5) [nm]	typ. 300 - 1200 nm typ. tolerances ± 1% to ± 2% of edge wavelength
For individual requirements concerning spectral transmittance within passband and blocking region, please contact us.	
Other properties	
Humidity resistance	MIL-Std-810 C, method 507, proc. 1 : 10 cycles
Coating abrasion resistance	MIL-C-675 C, para. 4.5.10
Coating adhesion	MIL-M-13508 C, para. 4.4.6
Operating temperature[1)]	up to approx. 350 °C
Temperature dependence $\Delta\lambda_c/\Delta T$ [nm/°C]	can be optimized by a suitable choice of substrate and coating material combination to ≤ 0.005.
Notes	[1)] If operating temperatures over 100 °C are envisaged, please indicate on ordering so that an appropriate substrate can be selected.

Table 14: Specifications of filter types KIF and LIF

Preferred dimensions [mm]	
External dimensions	Dimensions of utilizable area
ø 12 +0/–0.3	see left column
ø 25 +0/–0.3	see left column
ø 50 +0/–0.3	see left column
□60 +0/–0.3	see left column
Thickness	1 ± 0.2
Other dimensions on request	

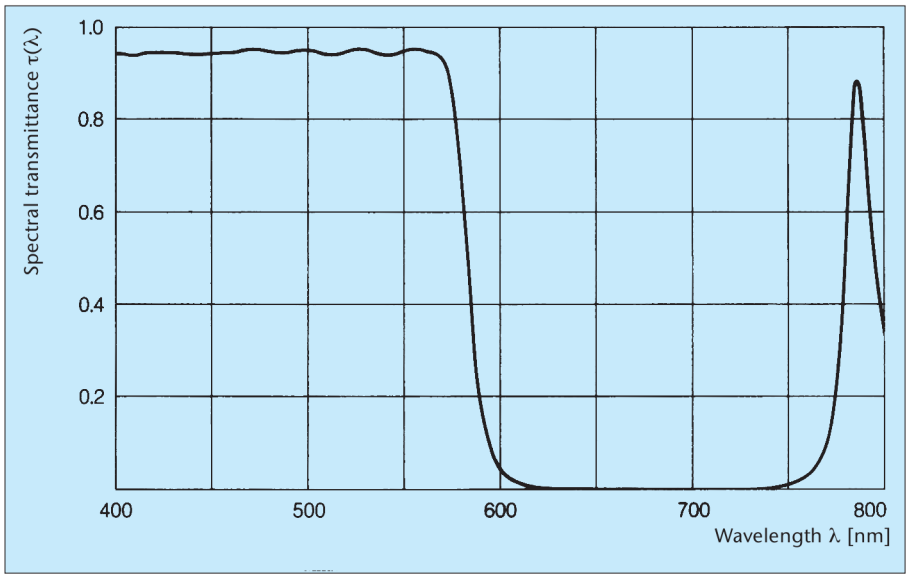

Fig. 25: Spectral transmittance curve (general curve) of filter type KIF

Preferred dimensions [mm]	
External dimensions	Dimensions of utilizable area
ø 12 +0/–0.3	see left column
ø 25 +0/–0.3	see left column
ø 50 +0/–0.3	see left column
□60 +0/–0.3	see left column
Thickness	1 ± 0.2
Other dimensions on request	

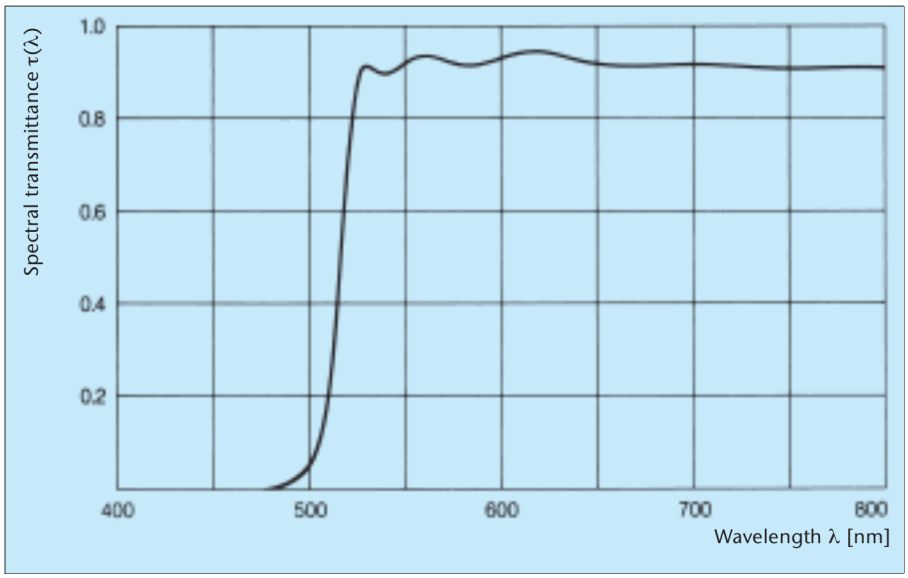

Fig. 26: Spectral transmittance curve (general curve) of filter type LIF