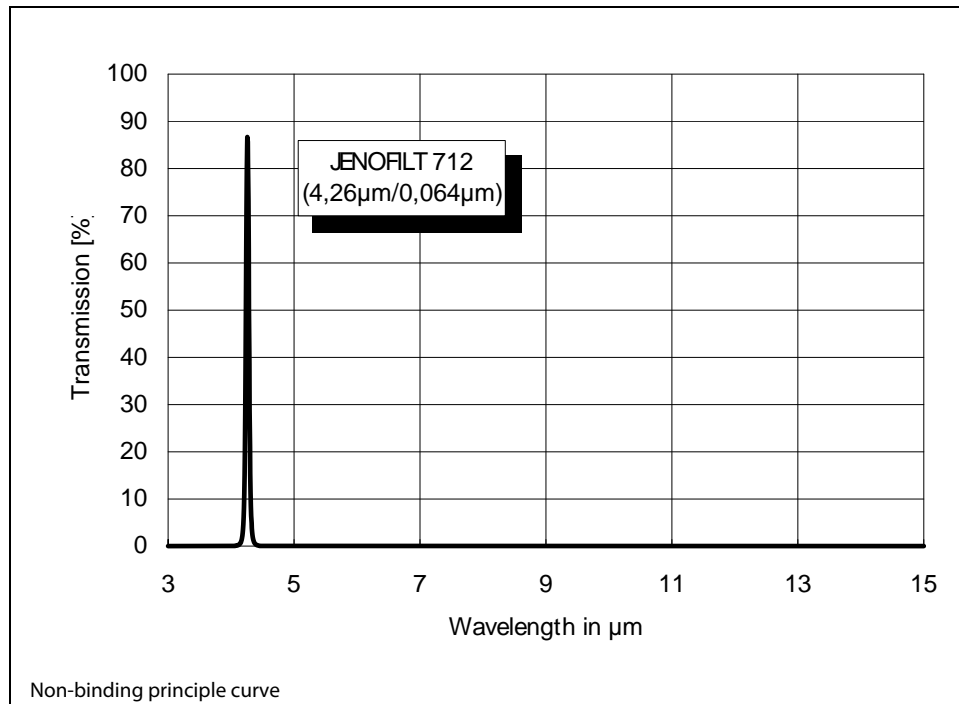


JENOFILT 712

Bandpass Filter on Sapphire Substrates



Bandpass Filter for IR

Optical properties:

Centre wavelength λ_0 (CWL): $3 \mu\text{m} \leq \lambda_0 \leq 6 \mu\text{m}$
 CWL tolerance $\Delta\lambda_0$: $\Delta\lambda_0 \leq \pm 1 \% (\lambda_0)$
 Half bandwidth (HBW): $< 2 \% \text{ of } \lambda_0$
 Peak transmission T_{max} :
 grade A $T > 70 \%$
 grade B $T > 60 \%$
 Bandwidth at 80% T_{max} : $> 0.4 \text{ HBW}$
 Bandwidth at 5 % absolute transmission: $< 2.5 \text{ HBW}$
 Bandwidth at 0.5 % absolute transmission: $< 5 \text{ HBW}$
 Temperature coefficient of CWL: $< 0.2 \text{ cm}^{-1}\text{K}^{-1}$
 Transmission out of band : $T_{\text{avn}} < 0.1 \%$
 from UV to $30 \mu\text{m}$

Applications:

JENOFILT 712 meets highest standards in gas analysis equipment and pollution control. By the use of sapphire substrates transmission leaks above $8 \mu\text{m}$ are impossible. Thus, this type is especially suitable for high end devices, e.g. for medical application.

Durability:

Adhesion: MIL-F-48616 / section 4.6.8.1
 Humidity: MIL-F-48616 / section 4.6.8.2
 Abrasion resistance: MIL-F-48616 / section 4.6.8.3

Substrate material:

1" sapphire wafer, thickness 0.5 mm.
 On request wafers can be cut into rectangular pieces $> 2 \text{ mm}$.

Special features:

Other specifications on request.

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Ordering code:

JENOFILT 712 (CWL/HBW)