

BK7 SCHOTT GLASS BK7

Optical BK7

Refractive Index at n_e	1.51872
Refractive Index at n_f	1.52283
Thermal Coefficient of Refractive Index at $\lambda=0.546$ microns, $^{\circ}\text{C}^{-1}$ for 0, +20 $^{\circ}\text{C}$	$2.8 \cdot 10^{-6}$
Transmission Range, microns (thickness 10mm)	0.35,2
Transmittance $t_i(\lambda)$ vs. wavelength λ BK7	

Internal Transmittance $t_i(\lambda)$ vs. wavelength λ	
$\lambda, \mu\text{m}$	$t_i(\lambda)$
0.310	0.59
0.320	0.81
0.350	0.986
0.365	0.994
0.370	0.995
0.380	0.996
0.390	0.998
0.400	0.998
0.420	0.998
0.460	0.999
0.500	0.999
0.700	0.999
1.060	0.999
1.530	0.997
1.970	0.968
2.325	0.89

Refractive Index n vs. wavelength λ	
$\lambda, \mu\text{m}$	$n(\lambda)$
0.365	1.53626
0.4047	1.53024
0.4358	1.52669
0.4800	1.52283
0.4861	1.52238
0.5461	1.51872
0.5876	1.51680
0.5893	1.51673
0.6328	1.51509
0.6438	1.51472
0.6563	1.51432
0.7065	1.51289
0.8521	1.50981
1.0140	1.50731
1.0600	1.50669
1.5296	1.50094
1.9700	1.49500
2.3254	1.48929

Thermal BK7

Thermal Linear Expansion $\alpha_t, ^{\circ}\text{C}^{-1}$ for -30,+70 $^{\circ}\text{C}$	$7.1 \cdot 10^{-6}$
Thermal Conductivity, $\text{W}/(\text{m} \cdot ^{\circ}\text{C})$ at 20 $^{\circ}\text{C}$	1.114
Specific Heat Capacity, $\text{J}/(\text{kg} \cdot ^{\circ}\text{C})$	858.0
Melting Point, $^{\circ}\text{C}$	559

Mechanical BK7

Density, g/cm^3 at 20 $^{\circ}\text{C}$	2.51
Poisson Ratio	0.206
Young Modulus (E), Pa	$8.1 \cdot 10^{10}$

"Opto-Technological Laboratory" produces mirrors, lenses, windows, prisms, wedges, ball lenses, cylindrical lenses and others optical components according to customers' specifications and drawings out of BK7 schott glass.