

ZERO EXPANSION GLASS (Zerodur®)

Optical

Refractive Index at n_e	1.5447
Refractive Index at $n_F - n_C$	0.00975
Thermal Coefficient of Refractive Index at n_e , $^{\circ}\text{C}^{-1}$ for 0, +20 $^{\circ}\text{C}$	$1.43 \cdot 10^{-5}$
Transmission Range, microns (thickness 10MM)	0.5, 2.5
Transmittance $t_i(l)$ vs. wavelength l	Zerodur® is a registered trademark of Schott Glass Technologies

Refractive Index n vs. wavelength l	
l, MKM	$n(l)$
0.4358	1.5544
0.4800	1.5497
0.4861	1.5491
0.5461	1.5447
0.5876	1.5424
0.6438	1.5399
0.6563	1.5394

Thermal

Thermal Linear Expansion a_t , $^{\circ}\text{C}^{-1}$ for +20, +300 $^{\circ}\text{C}$	$0.05 \cdot 10^{-6}$
Thermal Conductivity, $\text{W}/(\text{m} \cdot ^{\circ}\text{C})$ for +80, +100 $^{\circ}\text{C}$	1.64
Specific Heat Capacity, $\text{J}/(\text{kg} \cdot ^{\circ}\text{C})$	821.0

Mechanical

Density, g/cm^3 at 20 $^{\circ}\text{C}$	2.53
Poisson Ratio	0.24
Young Modulus (E), Pa	$9.1 \cdot 10^{10}$

"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 siall and Zerodur®.