

# Glass 8625

## Technical Data

GlassType/Application	Biocompatible glass, high IR-absorbing, Transponders (implantable)		
Physical Data	Coefficient of mean linear thermal expansion		
	$\alpha$ (20°C;300°C) (ISO 7991) .....	9.2	$10^{-6}K^{-1}$
	Transformation temperature $T_g$ (ISO 7884-8).....	514	°C
	Glass temperature at viscosity $\eta$ in dPa·s		
	$10^{13}$ (annealing point) (ISO 7884-4).....	520	°C
	$10^{7.6}$ (softening point) (ISO 7884-3).....	710	°C
	$10^4$ (working point) (ISO 7884-2).....	1023	°C
	Stress-optical coefficient K (DIN 52314).....	-	$10^{-6}mm^2 \cdot N^{-1}$
	Density $\rho$ at 25°C .....	2.52	$g \cdot cm^{-3}$
	Modulus of elasticity E (Young's modulus) .....	73	$10^3N \cdot mm^{-2}$
	Poisson's ratio $\mu$ .....	0.22	
	Thermal conductivity $\lambda_w$ at 90°C .....	1.1	$W \cdot m^{-1} \cdot K^{-1}$
	Log of the electric volume resistivity ( $\Omega \cdot cm$ )		
	at 250°C .....	7.2	
	at 350°C .....	5.8	
	$t_{k100}$ .....	210	°C
	Dielectric constant $\epsilon$ for 1 MHz at 25°C .....	7.1	
	Dielectric loss factor $\tan \delta$ for 1 MHz at 25°C .....	68	$10^{-4}$
	Refractive index $n_d$ ( $\lambda = 587.6$ nm) .....	1.525	
Chemical Resistance	Hydrolytic resistance (ISO 719) .....	Class	HGB 3
	Acid resistance (DIN 12116) .....	Class	S 1
	Alkali resistance (ISO 695) .....	Class	A 2
	The heavy metal content for the elements lead, cadmium, mercury and hexavalent chromium is below 100 ppm		