

Glass 8360

Technical Data

Glass Type/Application	Soft glass, lead-free. Encapsulation of semiconductor components at low temperature (diodes).			
Physical Data (approx. value)	Coefficient of mean linear thermal expansion $\alpha(20^{\circ}\text{C}; 300^{\circ}\text{C})$ (ISO 7991) 9.1 10^{-6}K^{-1}			
	Transformation temperature T_g (ISO 7884-8) 465 $^{\circ}\text{C}$			
	Glass temperature at viscosity η in dPa·s			
	10^{13} (annealing point) (ISO 7884-4) 470 $^{\circ}\text{C}$			
	$10^{7.6}$ (softening point) (ISO 7884-3) 575 $^{\circ}\text{C}$			
	10^4 (working point) (ISO 7884-2) 745 $^{\circ}\text{C}$			
	Stress-optical coefficient K (DIN 52314) 2.9 $10^{-6}\text{mm}^2\cdot\text{N}^{-1}$			
	Density ρ at 25°C 2.66 $\text{g} \cdot \text{cm}^{-3}$			
	Modulus of elasticity E (Young's modulus) 85 $10^3\text{N} \cdot \text{mm}^{-2}$			
	Poisson's ratio μ 0.238			
	Thermal conductivity λ_w at 90°C 1.0 $\text{W}\cdot\text{m}^{-1}\cdot\text{K}^{-1}$			
	Log of the electric volume resistivity ($\Omega\cdot\text{cm}$)			
	at 250°C 8.5			
	at 350°C 6.7			
	Chemical Resistance	t_{k100} (DIN 52326) 275 $^{\circ}\text{C}$		
		Dielectric constant ϵ for 1 MHz at 25°C 7.3		
Dielectric loss factor $\tan \delta$ for 1 MHz at 25°C 24 10^{-4}				
Refractive index n_d ($\lambda = 587.6 \text{ nm}$) 1.566				
	Hydrolytic resistance (ISO 719) Class HGB 3			
	Acid resistance (DIN 12116) Class S 4			
	Alkali resistance (ISO 695) Class A 3			
The heavy metal content for the elements lead, cadmium, mercury and hexavalent chromium is below 100 ppm.				