

Glass designation :	<b>Alkali Borosilicate</b>	Code	<b>7056</b>
Color : <b>White</b>			
Glass type : <b>Alkali borosilicate</b>			



*Kovar sealing  
glass material*

	Metric	English
<b>Mechanical</b>		
Density	2.29 g/cm <sup>3</sup>	143 lb/ft <sup>3</sup>
Youngs Modulus	6.4 x 10 <sup>3</sup> kg/mm <sup>2</sup>	9.2 x 10 <sup>6</sup> psi
Poissons Ratio	0.21	
Shear Modulus	2.7 x 10 <sup>3</sup> kg/mm <sup>2</sup>	3.8 x 10 <sup>6</sup> psi
<b>Viscosity</b>		
Working Point (10 <sup>4</sup> poise)	1058 °C	1936 °F
Softening Point (10 <sup>7.6</sup> poise)	718 °C	1324 °F
Annealing Point (10 <sup>13</sup> poise)	512 °C	954 °F
Strain Point (10 <sup>14</sup> poise)	472 °C	882 °F
<b>Thermal</b>		
Coefficient of Expansion (0 °C - 300 °C) (25 °C to set point 477 °C)	51.5 x 10 <sup>-7</sup> / °C 54.5 x 10 <sup>-7</sup> / °C	28.5 x 10 <sup>-7</sup> / °F 30.0 x 10 <sup>-7</sup> / °F
<b>Electrical</b>		
Log <sub>10</sub> Volume Resistivity @ 250 °C	10.3 ohm-cm	
Log <sub>10</sub> Volume Resistivity @ 350 °C	8.4 ohm-cm	
Dielectric Constant @ 20 °C, 1 MHz	5.7	
Loss Tangent @ 20 °C, 1 MHz	0.27%	
<b>Optical</b>		
Refractive index (589.3nm)	1.486	
<b>Chemical</b>		
Weathering: <b>2</b>		
Acid Durability: <b>4</b>		
Weathering is defined as corrosion by atmospheric-borne gases and vapors such as water and carbon dioxide. Glasses rated(1) will almost never show weathering effects; those rated (2) will occasionally be troublesome, particularly if weathering products cannot be removed; those glasses rated (3) will require more careful consideration.		
Acid durability classified glasses according to their behavior in 5% hydrochloric acid at 95 °C (203 °F) for 24 hours.		
Classification: Thickness loss (inches) (1) < 10 <sup>-6</sup> (2) 10 <sup>-6</sup> - 10 <sup>-5</sup> (3) 10 <sup>-5</sup> - 10 <sup>-4</sup> (4) > 10 <sup>-4</sup>		

Non-toleranced numerical values are typical values