

ROBAX

This material is a highly transparent glass-ceramic having virtually zero thermal expansion and sufficient mechanical strength for most standard applications it is highly resistant to thermal stress and chemical attack

As a result of its extremely low thermal expansion, it can be subjected to extreme temperature differences, even when used in high temperature applications it maintains excellent stability of form

It is available in flat or rolled sheets

Applications include: chemical process sight glass, high temperature vision windows, heat insulators, commercial ovens/broilers, architectural and outdoor lighting, electronics and UV light wave blocking applications

TYPICAL PROPERTIES

Density	2.56 g/cc
Thermal expansion (20-700 °C)	0 ± 0.5 x 10 ⁻⁶ /K
Specific heat	0.8 x 10 ³ J/(kg x K)
Thermal conductivity	1.6 W/ (m x k)
Poisson's ratio μ	0.25
Bending strength	35 MPa
Modulus of Elasticity	92.0 GPa
Shear Modulus	36.8 GPa
Chemical Resistance DIN12116	Class S3
Alkaline Resistance ISO 695	Class A2
Hydrolytic Class DIN ISO 719	Class HGB 1

ELECTRICAL PROPERTIES

Volume Resistivity 350°C > 250°C > 175°C	= 250000 ohm-cm = 6.30e+6 ohm-cm =1.00e+8 ohm-cm
Dielectric Constant	7.80
Dissipation Factor	0.0190
Specific Heat Capacity	0.800 J/g -°C
Thermal Conductivity @ 90°C	1.60 W/m -K

Maximum service temperature in air depends on temperature gradient

680 °C	100 to 10,000 hr
760 °C	<100 hr