

DATA SHEET

IR QUARTZ – QI 32

General Product Description

IR Quartz – QI 32 is a high purity quartz glass materials made by fusion of natural quartz crystals in an electrically heated furnace. QI 32 provides good UV, visible and IR transmission. Due to the low water content, it shows superior transmission at IR range up to 3500nm. Used as an equivalent to HOQ310.

The high purity (over 99.95%) of QI 32 Fused Quartz materials ensures minimum contamination in process applications. The low coefficient of thermal expansion allows the materials to be rapidly heated and cooled with virtually no risk of breakage.

QI 32 shows low bubble and inclusion content and is visually bubble-free. QI 32

provides excellent physical, thermal, optical characteristics.

Chemical Properties(Typical Value)

Unit: ppm

Al	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ti	Zr
13	0.34	<0.01	<0.01	0.08	0.17	0.56	0.01	<0.01	0.41	1.2	1.3

OH content: around 2-3ppm

Physical Properties

Physical Property	Value
Density(g/cm ³)	2.2
Max. Working Temperature(°C)	1200
Coefficient of Thermal Conductivity(w/m·k,1000°C)	2.28
Coefficient of Thermal Expansion(°C-1,1000°C)	5.5x 10 ⁻⁷
Softening Point(°C)	1670
Annealing Point(°C)	1210
Strain Point(°C)	1110
Design Tensile Strength(Mpa)	49
Design Compressive Strength(Mpa)	1100
Mohs Hardness	6-7
Young's Modulus(Mpa)	7.5x 10 ⁴
Poisson's Ration	0.17

DATA SHEET**IR QUARTZ – QI 32****TRANSMISSION CURVE – 2mm Thick**