

Quartz Plate

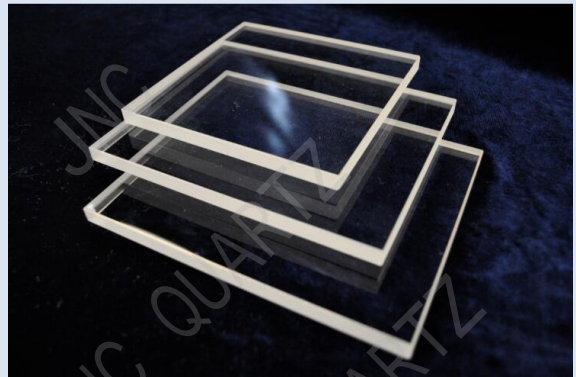
Applications

Semiconduct Window LED

Characteristics

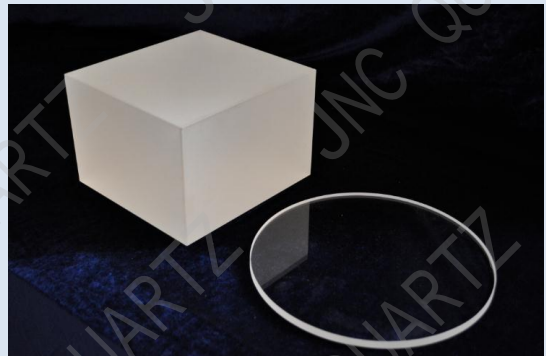
Temperature stability, Heat shock resistance,

Low thermal expansion, Corrosion resistant



JNC Fused quartz plates and discs are widely used throughout a variety of industrial applications.

Due to the unique properties of quartz it is ideally suited to applications that require a combination of chemical resistance, high temperature stability and high thermal shock resistance paired with low thermal expansion.



Transparent quartz glass plates are divided into two larger groups: flame fused and electrically fused. In each group a variety of grades is available, each with individual advantages for specific applications.

NC-H00

Electrically fused method, producing the ingot with ingot with the low hydroxyl content by vacuum method, it has good transmission during ultrared zone, Now the Max plate size 700*700*T<5mm

NC-200

Using flaming method to produce round ingot,
Flame fused ingot are re-heated to make many
shapped plate.

The plate size NC-200 series

Transparent square plate(polishing)

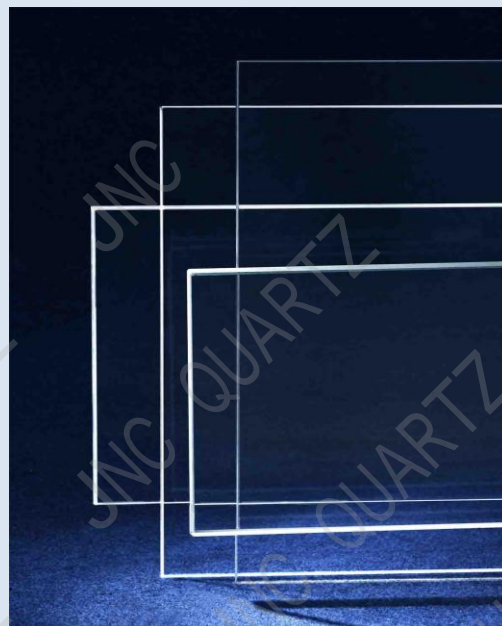
OD2*T>0.5mm ~ OD1200*T>5mm

Transparent square plate(polishing)

L10*W10*T>0.5mm ~ L1200*W1200*T>5mm

Transparent square plate(raw material)

Max size: L1400*W1400*T>5mm



Tranparent quartz glass property

Property	NC-200	NC-210	NC-H00
Density	$2.21 \times 10^3 \text{kg/m}^3$	$2.21 \times 10^3 \text{kg/m}^3$	$2.21 \times 10^3 \text{kg/m}^3$
Hardness	580KHN ₁₀₀	580KHN ₁₀₀	580KHN ₁₀₀
Tensile Strength	$4.9 \times 10^7 \text{Pa(N/m}^2\text{)}$	$4.9 \times 10^7 \text{Pa(N/m}^2\text{)}$	$4.9 \times 10^7 \text{Pa(N/m}^2\text{)}$
Compression Strength	$>1.1 \times 10^9 \text{Pa}$	$>1.1 \times 10^9 \text{Pa}$	$>1.1 \times 10^9 \text{Pa}$
Coefficient of Thermal Expansion(20-300°C)	$5.5 \times 10^{-7} \text{cm/cm}^\circ\text{C}$	$5.5 \times 10^{-7} \text{cm/cm}^\circ\text{C}$	$5.5 \times 10^{-7} \text{cm/cm}^\circ\text{C}$
Thermal Conductivity(20°C)	1.4W/m°C	1.4W/m°C	1.4W/m°C
Specific Heat	680J/kg°C	690J/kg°C	700J/kg°C
Softening Point	1700°C	1750°C	1760°C
Annealing Point	1210°C	1250°C	1260°C

Chemical element composition (Typical data) ppm

	Al	Fe	K	Li	Cu	Na	B	Ca	Mg	P	Ti	OH
NC-200	20	0.4	1	1.4	0.01	1.5	0.2	0.5	---	---	---	120-260
NC-210	15	0.2	0.6	0.4	0.02	0.8	0.1	0.4	0.05	0.06	1.2	120-260
NC-H00	8	0.2	0.2	0.1	0.01	0.4	----	0.6	0.01	----	1.9	<5

