Quartz Ingot

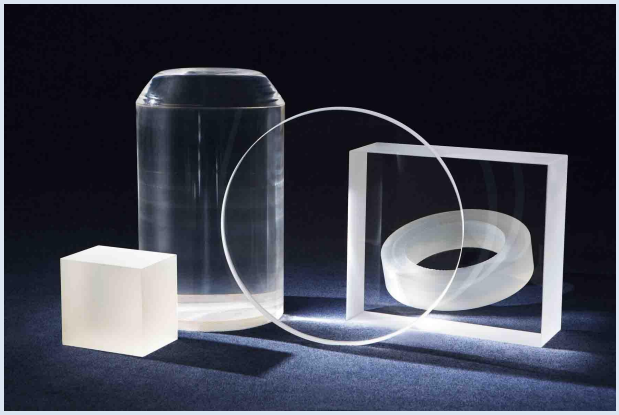
Applications

Semiconduct Window LED

Characteristics

Temperature stability, Heat shock resistance,

Low thermal expansion, Corrosion resistant



NC-200

NC-200 ingots are made with the highest quality natural quartz powders that have been refined using JNC proprietary purification process.These high purity powders are then fused using flame fusion technique resulting very few bubbles。in rectangular and bigger round shapes and in a wide range of sizes. These ingots help to reduce costs in volume applications. Ingots can be cut and ground or lapped to make blanks in a variety of shapes including rectangular or square plates, discs and rings.NC-200 seriers are applied semiconductor,solar,LED,flat panel display and so on.

The Max square ingot 2200*2200*H150-200mm

The Max round ingot OD2300*H150-200



NC-H00

NC-H00 is a quartz glass material manufactured by electric fusion. It combines excellent physical properties with excellent visual appearance and high purity. The low OH content makes it suitable for high-temperature and semiconductor high temperature applications.

The Max square ingot 800*800*H150-200

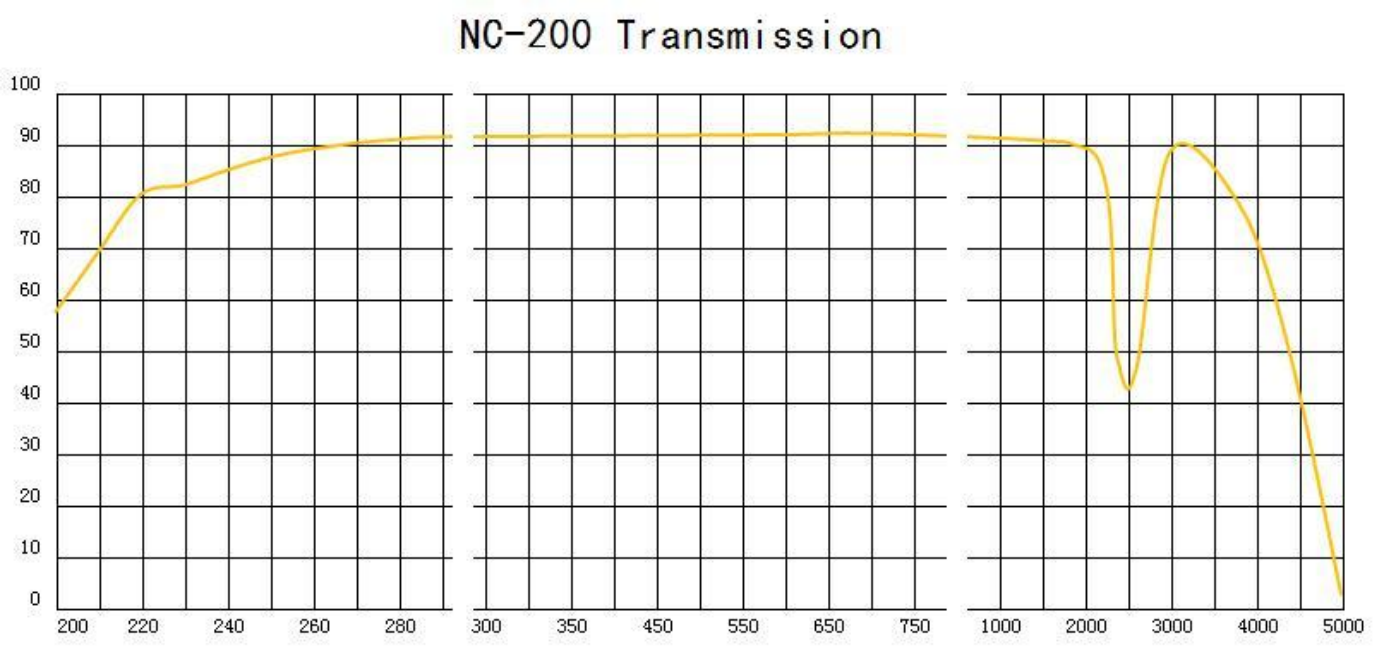
The Max round ingot OD800*H150-200

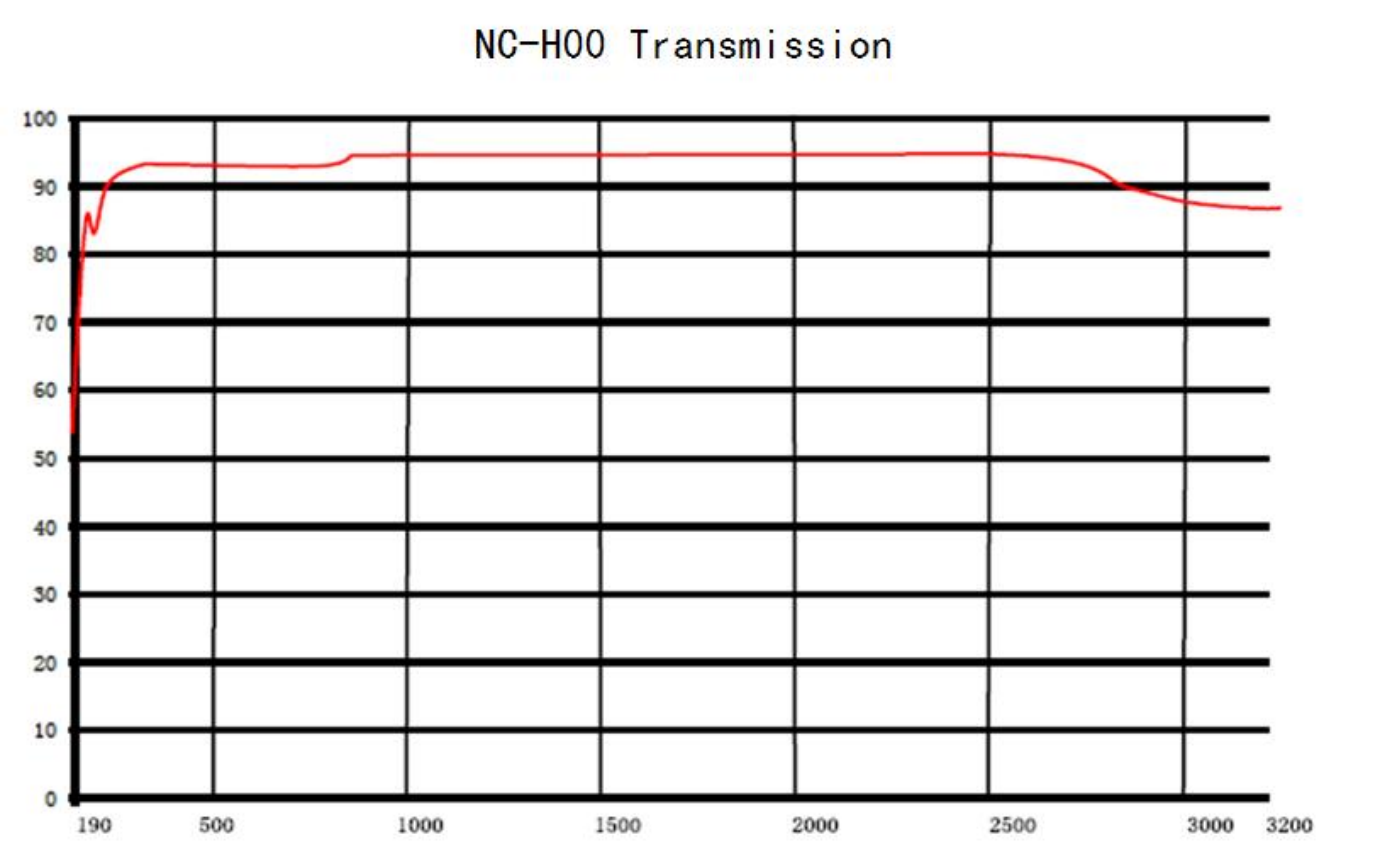
Chemical element composition (Tyical data) ppm

	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

Tranparent quartz glass ingot property

Property	NC-200	NC-210	NC-H00
Density	2.21×10^3kg/m³	2.21×10^3kg/m³	2.21×10^3kg/m³
Hardness	$580KHN_{100}$	$580KHN_{100}$	$580KHN_{100}$
Tensile Strength	4.9×10^7Pa(N/㎡)	4.9×10^7Pa(N/㎡)	4.9×10^7Pa(N/㎡)
Compression Strength	$>1.1\times10^9$Pa	$>1.1\times10^9$Pa	$>1.1\times10^9$Pa
Cofficient of Thermal Expansion(20-300℃)	5.5×10^{-7}cm/cm℃	5.5×10^{-7}cm/cm℃	5.5×10^{-7}cm/cm℃
Thermal Conductivity(20℃)	1.4W/m℃	1.4W/m℃	1.4W/m℃
Specific Heat	680J/kg℃	690J/kg℃	700J/kg℃
Softening Point	1700℃	1750℃	1760℃
Annealing Point	1210℃	1250℃	1260℃


NC-200 Transmission
100
90
80
70
60
50
40
30
20
10
0
200
220
240
260
280
300
350
450
550
650
750
1000
2000
3000
4000
5000


NC-H00 Transmission
100
90
80
70
60
50
40
30
20
10
0
190
500
1000
1500
2000
2500
3000
3200