

DATA SHEET

FUSED QUARTZ - OPTICAL GRADE

Chemical Impurities

Typical mean value (ppm)													
Al	Co	Ca	B	Cu	Fe	K	Li	Mg	Mn	Na	Ni	Ti	OH
18	0.01	0.4	0.03	0.02	0.2	0.6	0.4	0.02	0.06	0.8	0.02	1.2	200

Physical Properties

Density	2.20g/cm ³
Hardness	580 KHN 100
Tensile Strength	4.8x10 ⁷ Pa (N/mm ²)
Compressive Strength	> 1.1x10 ⁹ Pa
Coefficient of Thermal Expansion	5.5x10 ⁻⁷ cm/cm.°C (20°C-320°C)
Thermal Conductivity	1.4 W/m.°C
Specific Heat	670 J/kg.°C
Softening Point	1700°C
Annealing Point	1215°C
Electrical Resistance	7x10 ⁷ ohm.cm (350°C)
Dielectric Constant	3.74 (10 GHz)
Dielectric Strength	3.7 x 10 ⁷ V.m ⁻¹
Dielectric Loss Factor	0.0002 (10 GHz)

Refractive Index

ng	nf	ne	nd	nc
1.46679	1.46324	1.46021	1.45857	1.45646

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Transmission Data

