

**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 <sup>3</sup>
Hardness	580 KHN 100
Tensile Strength	4.8x10 <sup>7</sup> Pa (N/mm <sup>2</sup> )
Compressive Strength	> 1.1x10 <sup>9</sup> Pa
Coefficient of Thermal Expansion	5.5x10 <sup>-7</sup> 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 <sup>7</sup> ohm.cm (350°C)
Dielectric Constant	3.74 (10 GHz)
Dielectric Strength	3.7 x 10 <sup>7</sup> V.m <sup>-1</sup>
Dielectric Loss Factor	0.0002 (10 GHz)

Refractive Index

ng	nf	ne	nd	nc
1.46679	1.46324	1.46021	1.45857	1.45646

**DATA SHEET**

**FUSED QUARTZ - OPTICAL GRADE**

Transmission Data

