

**Lithiumniobat  
für VIS und IR-Bereich**

**Lithium Niobate  
for VIS and IR-range**

Formula	LiNbO <sub>3</sub>
Growth method	Czochralski method
Max. sizes, (mm)	Ø76.2
Transmission range, (µm) (Thickness 1 mm)	0.4 – 5.0
Structure	Trigonal
Density (g/cm <sup>3</sup> )	4.64
Melting point (°C)	1253
Hardness (Mohs)	5
Thermal expansion coefficient (10 <sup>-6</sup> /K)	parallel c-axis: 15.4 parallel a-axis: 7.5
Thermal conductivity (W m <sup>-1</sup> K <sup>-1</sup> )	38
Thermal optical coefficient (10 <sup>-6</sup> /K)	dn <sub>o</sub> /dT: -0.87 dn <sub>e</sub> /dT: 39.07
Wavelength (µm)	0.633 1.064 1.30
Refractive index n <sub>o</sub>	2.286 2.232 2.220
n <sub>e</sub>	2.203 2.156 2.146
Absorption coefficient (cm <sup>-1</sup> )	0.1 at 1.064 µm

Transmission spectrum:

