



Cerbec® NBD-200 Silicon Nitride

	Properties		Units	Performance
MECHANICAL	Density		g/cm ³	3.16
	Crystal Size	Average	μm	< 1
	Water Absorption		%	0
	Gas Permeability			0
	Flexural Strength (MOR)	20 °C	MPa	900
	Elastic Modulus	20 °C	GPa	320
	Poisson's Ratio	20 °C		0.26
	Compressive Strength	20 °C	MPa	2500
	Hardness		HV10	1550
	Fracture Toughness	ASTM F2094 IFR	MPa-m ^{1/2}	5.5
THERMAL	Thermal Conductivity	20 °C	W/m-K	29
	Coefficient of Thermal Expansion	25-1000 °C	1 X 10 ⁻⁶ /°C	2.9
	Specific Heat	100 °C	J/kg-K	-
	Thermal Shock Resistance	Δ T	°C	-
	Maximum Use Temperature		°C	1400
ELECTRICAL	Dielectric Strength	6.35 mm	ac-kV/mm	-
	Dielectric Constant	1 MHz, 25 °C		8
	Dielectric Loss (tan δ)	1 MHz, 25 °C		-
	Volume Resistivity	25 °C	Ω-cm	> 10 ¹⁴

The chart is intended to illustrate typical properties. Property values vary with method of manufacture, size, and shape of part. Data contained herein is not to be construed as absolute and does not constitute a representation or warranty for which CoorsTek assumes legal responsibility. CoorsTek and Cerbec are registered trademarks of CoorsTek, Inc.



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