



Zirconia Ceramic Substrate		
Item	Unit	ZrO2
Mechanical Properties		
Color	/	White
Density	g/cm ³	≥6
Water Absorption	%	0
Vickers Hardness (Load 4.9N)	Gpa	11
Young's Modulus	GPa	200
Flexural Strength	Mpa	>800
Fracture Toughness	MPa·m ^{1/2}	5.0
Thermal Properties		
Max. Service Temperature (Non-loading)	°C	1000
CTE (Coefficient of Thermal Expansion) (20-800°C)	1×10 ⁻⁶ /°C	7.8
Thermal Shock Resistance	≥10 Times	No Crack
Thermal Conductivity (25°C)	W/m·K	>3
Specific Heat (25°C)	J/kg·K	460
Electrical Properties		
Volume Resistivity (25°C)	Ω·cm	≥10 ¹³
Dielectric Strength	KV/mm	≥10
Dielectric Constant (25°C, 1MHz)	(E)	33
Dielectric Loss Angle (25°C, 1MHz)	×10 ⁻⁴	≤16