

## Material characteristics

### Material

### Zirconia ceramics

### Type

### Z-700E

### Short description

Partially stabilised Zirconia  
Y-TZP (white)

### Table of Characteristics

Density	g/cm <sup>3</sup>	> 6,0
Porosity	%	0
Average Grain Size	µm	0,35

### Mechanical Properties

Bending Strength (4 pt.)	MPa	1100
Modulus of Elasticity	GPa	210
Fracture Toughness	MPa m <sup>1/2</sup>	10,5

### Thermal Properties

Maximum Working Temperature	°C	to 1200
Coefficient of Thermal Expansion (20 - 1000° C)	10 <sup>-6</sup> K <sup>-1</sup>	10,5
Thermal Conductivity at 100 °C	W/mK	2

### Electrical Properties

Specific Resistance at 20° C	Ωcm	10 <sup>9</sup>
Dielectric Strength	kV/mm	-

These values are typical ceramic material properties and may vary according to product configuration and manufacturing process.